

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1135—VOL. XXVII.]

London, Saturday, May 23, 1857.

STAMPED . . . SIXPENCE.
UNSTAMPED . . . FIVEPENCE.

Mining Exchange of London.

The following are MEMBERS of the MINING EXCHANGE:—
W. Bawden. W. C. Foulkes. Powell and Cooke.
T. Bensman. J. Herron. J. J. Reynolds, jun.
C. Best, jun. Jebu Hitchins. H. B. Rye.
W. Birdsey. W. Mitchell. George Spratley.
F. E. Blyth. G. Moore. T. P. Thomas.
J. B. Brenchley. J. H. Murchison. W. Ward.
P. Clay. T. Painter. Watson and Cussell.
Theo. Field. J. R. Pike. P. Watson.
Grand Eagle-court, Finch-lane, May 22, 1857. N. F. Watson, Hon. Sec.

R. JAMES CROFTS, MINING AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL, LONDON, TRANACTS BUSINESS,
IN BUYING AND SELLING, for immediate cash.
DIVIDEND MINES, well selected, are the best of any known investments—pay-
from 15 to 20 per cent. per annum in dividends. The choice of NON-DIVIDEND
MINES for speculation requires careful discrimination.

Lists of such mines as Mr. Crofts considers at this moment eligible for investment,
speculation, in dividend, proximate dividend, and progressive, furnished on ap-
plication.

R. JAMES LANE, No. 29, THREADNEEDLE STREET, has
BUSINESS TO TRANACT in most of the DIVIDEND and PROGRESSIVE
MINES; and begs to refer to his *Weekly Mining Review*, published every Friday.

N. R. BALE, DIVIDEND MINES:—
5 Alfred Cons., 21%. 1 Rosewarne, 24%. 5 St. S. Tolpuddle, 23%.
Condurrow, 21%. 5 Par Consols, 22%. 1 West Weston, 21%.
Pewsey Consols, 22%. 1 South Tolpuddle, 21%. 1 Wheal Bassett, 22%.
Ding Dong, 23%. 1 South Frances, 23%. 1 Wh. Margery, 22%.
Gambler, 21%. 20 St. Day United, 21%. 1 Wheal Buller, 22%.
NON-DIVIDEND—
5 Hender, 21%. 3 Trefusis, 27%. 10 Tehidy, 23%.
5 Great Dows, 22. 6d. 5 Rosew. & Herl., 23%.
5 Great Dows, 22. 6d. 20 East Wh. Russell, 12%. 20 Great Hews, 21%.
Leeds & St. Aub., 23%. 25 Harriett, 13%. 50 Cae-Cynon, 2s.
5 North Frances. 5 Porthkell. 5 Wh. Emma (Buck.), 21%.
is a BUYER of South Cadron, Wheal Resth, Carnorth, Grenville, Carvannal,
St. Aubyn and Grylls, for immediate cash.
Apply to JAMES B. BRENCHLEY, 11, Royal Exchange, London, E.C.

DIVIDEND MINES, well selected, are the BEST of all PUBLIC
INVESTMENTS, paying, as they do (in dividends every two or three months),
from 10 to 20 per cent. per annum. NON-DIVIDEND MINES, carefully chosen,
generally advance in price 500 per cent., or more.

PETER WATSON, MINING BROKER, having 12 years' experience in every
department of mining and its management, together with an extensive and regular
correspondence with mining agents and others in Cornwall, Devon, and elsewhere,
enabled to judge of and select mines of intrinsic value. Peter Watson, being a
member of the Mining Exchange, will forward a list of prices when required, and
be consulted daily as to purchases, sales, &c.

Mr. Peter Watson is a SELLER of SHARES at the following prices:—
East Gunnis Lake, 23%. Zion, 20%.
Pake Wallis, 23%. 5 Great Alfred, 21%.
Porthkell, 23%. 5 South Cadron, 15%.
Great Alfred, 21%. 100 Great Hews, 21%.
North Robert, 23%. 100 Great Vor. 100 Great Vor.
East Alfred, 23%. 25 Hender, 21%.
Ding Dong, 23%. 50 Lady Bertha, 10%.
Great Dows, 22. 6d. 20 St. Ives Consols, 2s.
Great Dows, 22. 6d. 25 Margery, 23%.
Great Dows, 22. 6d. 30 Par Consols, 22%.
Great Dows, 22. 6d. 35 Rosewarne, 23%.
Great Dows, 22. 6d. 40 Providence, 23%.
Great Dows, 22. 6d. 45 Tehidy, 23%.
Great Dows, 22. 6d. 50 Wh. Emma (Buck.), 21%.
Great Dows, 22. 6d. 55 Wh. Margery, 23%.
Great Dows, 22. 6d. 60 Wh. Resth, 23%.
Great Dows, 22. 6d. 65 Wh. Resth, 23%.
Great Dows, 22. 6d. 70 Wh. Resth, 23%.
Great Dows, 22. 6d. 75 Wh. Resth, 23%.
Great Dows, 22. 6d. 80 Wh. Resth, 23%.
Great Dows, 22. 6d. 85 Wh. Resth, 23%.
Great Dows, 22. 6d. 90 Wh. Resth, 23%.
Great Dows, 22. 6d. 95 Wh. Resth, 23%.
Bankers—Union Bank of London.
Commission 1/4 per cent. on all transactions.
5, Threadneedle-street, London, May 22, 1857.

RETHELLAN MINE SHARES.—THOMAS WATSON is a
BUYER.—Address him at Mr. Peter Watson's, 57, Threadneedle-street.

R. LELEAN, 4, CUSHION COURT, OLD BROAD STREET,
E.C., has the following SHARES FOR SALE, at LOWER PRICES than any
hitherto offered:—
10 East Russell. 50 St. Austell.
5 East Trefusis. 50 South Buller and West
Penstrefual.
5 Great Alfred.
5 Great Hews.
100 Great Vor.
100 Great Vor.
50 Lady Bertha.
25 Margery.
25 Rosewarne.
25 Wh. Emma (Buck.).
25 Wh. Resth.
25 Wh. Wrey.
And a great many others, too numerous for an advertisement.

NO CAPITALISTS.—RELIABLE INFORMATION may be
obtained on application to the undersigned, in respect of MISCELLANEOUS
CURIOSITY generally. BANKS, INSURANCE SHARES, LAND COMPANIES,
&c. (British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC
ANDS BOUGHT AND SOLD at the closest market prices, and at moderate commis-
sions given and required. JOHN BATTERS, Stock and Sharebroker,
4, Throgmorton-street, London, E.C.

MESSRS. J. AND C. CARKREEK, MINING SHARE DEALERS
AND COMMISSION AGENTS, from their long practical knowledge of min-
ing, desire to state that they are at all times enabled to FURNISH THE BEST IN-
FORMATION as to the prospects, &c., of CORNISH MINES in general; and by
being well advised those friends who may be pleased to entrust them with such
a course which cannot fail to be satisfactory. Mine inspectors.

R. B. TREDINICK, BROKER AND GENERAL DEALER,
GRESHAM HOUSE, OLD BROAD STREET, LONDON.

R. E. GOMPERS' 518 A BUYER OF—
25 Edward, 23%. 100 Sortridge, 21%.
Alfred, 21%. 20 Wh. Emma, 23%.
Harriet, 12. 6d. 50 West warne, 23%.
Old Russell. 70 East Russell, 10%.
Old Russell. 200 Molland.
Old Russell. 3 Molland.
A SELLER of—
Great Alfred, 23%.
50 Cromer.
20 Edward, 23%.
20 Gwast, 17. 6d.
20 Gwast, 17. 6d.
3, Crown Chambers, Threadneedle-street.

ENRY GOULD SHARP IS INSTRUCTED TO BUY—
20 Hender, 21%. 20 Bryntall, 23%.
20 East Providence, 16%. 1 Cargoll, 21%.
20 Buller & Berthas, 7. 6d. 5 Wh. Emma, 23%.
Pedan-an-dre, 21%. 50 Queen of Dart, 31s.
Great Wh. Vor, 23%. 100 West Poldover, 18s.
50 Conserv. Lead Sh. 35 Severt, 23s.

ENRY GOULD SHARP IS INSTRUCTED TO BUY—
Lady Bertha, 10s. 50 Hawkenoor, 11s.
Rosewarne Unl., 21%. 50 East Wh. Russell, 11s.
South Cadron, 23%. 5 Cijah and Wentworth,
Bodallack, 23%.
An country buying and selling orders will be punctually attended to.

5, Church-court, Clement's-lane, Lombard-street, London.

R. GEORGE BUDGE, of 4, BIRCH LANE, CORNHILL,
LONDON, has SHARES FOR SALE at the following prices:—

Lady Bertha, 10s. 2d. 50 Catherine and Jane.
Great Wh. Vor, 23%. 50 Sortridge Cons., 21%.
Great Wh. Vor, 23%. 50 Great Wh. Vor, 23%.
Great Wh. Vor, 23%. 50 Queen of Dart, 31s.
Great Wh. Vor, 23%. 50 West Poldover, 18s.
Great Wh. Vor, 23%. 35 Severt, 23s.

50 Catherine and Jane.

50 Sortridge Cons., 21%.
50 Great Wh. Vor, 23%.
50 Queen of Dart, 31s.

50 West Poldover, 18s.

50 Devon and Courtney, 23s.

50 Devon and

WHEAL LOPE.

The following reports of the managing director and of the agents were read at the bi-monthly meeting, held the 12th of May, at the offices, No. 3, Old Broad-street:—

At this, your first legally constituted meeting, a quorum not having been formed at the last, it may be desirable to recapitulate the circumstances under which Wheal Lopes was re-opened, and the conditions on which the public were invited to join in the adventure.

Wheal Lopes is an old mine; I have traced the workings of the "old men" to a remote period; and Sir Massey Lopes has informed me that a lease of the sett was granted in 1780. It was, however, last worked by the Plymouth and Dartmoor Mining Company till the end of the year 1845, when it was abandoned for want of funds, much to the regret of the adventurers, as the following extract, from the reports of a meeting held July 5, 1844, will show. Mr. W. Prance, the Chairman, stated "that the agents' reports were highly satisfactory, fully warranting a further outlay, for the mine never presented such encouraging prospects." The continued fall, however, of the standard, at this period, from 107. 8s. in 1844, to 90. 13s. in 1848, which proved so fatal to many mines, appears to have disheartened the shareholders, and the mine was abandoned.

In Jan., 1856, Capt. Phillips, of the Bedford United Mines, than whom a more experienced miner can scarcely be found, knowing the value of the mine, applied for and obtained, a lease of the sett for 21 years, at 1-15th dues, paying the lord a high premium for the grant. The requisite buildings and underground works were commenced in May, and the necessary machinery to drain the mine contracted for and erected. It was only when these preliminary steps had been taken, and the value of the mine, and the outlay required to open it, ascertained, that the public were invited to join in the undertaking in December last.

It is not necessary to occupy your time in stating all the advantages contemplated in re-working this mine; a few will suffice. It was asserted:

1. That large deposits of copper ore were laid open in the different levels and winzes below the 30, which though valueless at the standard of 1844 and following years, would yield a good profit at an average standard of 130.

2. That immense quantities of zinc ore (blende) were also laid open. This mineral it is known was of no value at that period. It has now a ready sale; the price varying from 21. 10s. to 47. 10s. per ton. The blende found in this mine has been pronounced to be very pure; and a considerable quantity is already at surface.

3. That all the machinery could be worked by water-power, the River Plym furnishing an abundant stream of water, thus saving one of the heaviest items of expenditure in a mine—steam-power.

4. That as two of the shafts were sunk to deep levels, one to 62 fms., the other to 82; and that levels and winzes had been driven and sunk in various parts of the mine, no delay would take place in making returns of mineral as soon as the mine was drained.

It now remains for me to state how far these assertions were founded on facts. But first I will read extracts of a report made by a tributary, named Fezzy, who appears to have been one of the last miners who was underground, when the mine was filling with water.

His report is dated April 23, 1856. "A good shoot of ore was found in the 14, to the west of main engine-shaft. The 30 is extended about 30 fms. west of main shaft, but not far enough to meet the ore gone down in the bottom of the 14. The 60 west is driven about 13 fms., and we broke from the lode large stones of solid ore, weighing 15 or 16 lbs. in weight. I was in the mine the last core that ever worked, and we stayed in the 60 east west till the water took us up to the middle. East of main shaft, in a winze sunk from the 30 to the 50, there is a lode standing in the eastern point worth 2 tons of copper ore per fm. In a winze sunk from the 50 to the 60, the lode is standing, worth 1½ ton per fm. In a winze sunk from the 60 to the 70, the lode is worth 2 tons per fm. The eastern shaft is 32 fms. deep, the last 25 fms. was in elvan; in the last 2 fms. we had good slabs of ore."

So far the report: now for the facts. The water is drained, or in fork 35 fathoms.

In the 14 west there is a lode standing worth 1 ton of ore per fm. In the 30, east of main shaft, the lode is standing in the back, worth from 2 to 3 tons of copper and blende. In the winze from the 30 to the 60, as far as can be seen, the lode, both east and west, is richer than in the back, and is worth from 3 to 4 tons for copper and blende per fm. As the water is not drained deeper, nothing can be said of the other assertions, nor of the appearance of the lode west of main shaft, but it is surely only fair and reasonable to infer, that, as these statements have been found strictly correct in the 30, the others may be assumed to be equally true; and if so, then, without driving a single fathom, we shall have good reserves laid open to help on the cost. It is quite impossible at present to speak positively of their value for copper ore, as after being under water for twelve years, the lodes are thickly coated with dirt and green oxide of copper; but enough has been seen to warrant the conclusion that they will leave a good profit. The agent's reports will give details.

All the pitwork necessary to drain the mine to the 62 is ready, and will soon be fixed, and the water drained.

The presence of ore in the levels that are already drained, rendered it expedient to provide hauling and crushing machinery. These have been purchased, with a 38 ft. water-wheel, 2 ft. breast, to work them; and the necessary masonry for their erection is in progress. I calculate that the hauling machine will be in working order in June, and the crusher in July, when the ore in sight will be immediately brought to surface, crushed, and sent to market. The quantity of copper and zinc ores that can be immediately raised, cannot now be accurately estimated. But I believe I shall not be misleading you in stating that I anticipate our sampling for August will be considerable.

The financial statement will show that the expenditure exceeds the receipts by 4637. 6s., and that the estimated costs for the two next months will be 3107, making a total of 7737. 6d. As I cannot possibly hold out any hopes of returning ore before that period, I must ask you to call up a portion of the reserve fund of 12007. Half-a-crown per share will yield 7507., and this I think is all that need be subscribed for at present. I would wish to impress forcibly on your minds, that the machinery erected is equal to fork the mine to any depth, and that the pitwork already purchased will drain the mine below the 62.

All the expenses that have now to be incurred are for the ordinary working expenses of the mine, and as a proof how very moderate these will be, compared to an equal power produced by steam, I may state that in coals, grease, and engine-men's wages, there will be a saving of 80. per month. As very few shareholders have inspected the schedule of plant and machinery, I have thought it advisable to annex a summary of it, that they may be able to form an estimate of the value of their property.

In conclusion, I can only add that my conviction is stronger than ever that Wheal Lopes will make a lasting mine, and prove a most valuable investment. It can no longer be termed a speculation, as you have on the table the ore that has been raised from beneath the water.

W. H. MORTIMER.

Bedford United Mine, May 9, 1857.—After a careful inspection of the 30, I beg to hand you my views upon the mine. In looking at the back of the 30 east of Tregaskis shaft, I find, for a great many fms. in length, the lode is large, and of a very promising character, composed of capel, spar, blende, and will yield from two to three tons, of the latter per fm. besides some good copper ore. The bottom of the level is equally good, or rather better than the back, the mineral part of the lode being larger, and containing more copper ore, which is clearly shown by Collies' winze (No. 3), where the lode (as far as can be seen for water), which is between three and four fathoms below the bottom of the level) will yield for blende and copper ore from three to four tons per fm. This clearly shows the lode improves as it goes down, and looks well for the deeper levels. This winze is between two cross-courses; the eastern one is 55 fms. from it, and the western one 35 fms., therefore, the piece of ground between these two cross-courses, which is 90 fms. in length, and in which the winze referred to is sunk, may be considered a favourable one for turning out a quantity of mineral and considering the very favourable price now to be obtained for blende, and the high standard given for copper ore, my opinion is that there is to be obtained from the back and bottom of the 30 a great quantity of these minerals, which will leave a fair profit to the adventurers, as the cost of stopping the ground will be comparatively easy, say from 50s. to 3d. per fm. The drawing machine and crusher, which is on the mine, should be erected as soon as convenient, for the purpose of drawing the stuff, and rendering the ores marketable in the cheapest manner, as I have every reason to believe that, as soon as the water is in fork, there will be a tolerably good quantity of blende and copper ore raised from the ground already opened. In conclusion, I beg to say that the appearance of the lode in the 30 will bear out what has been said in former reports. All the machinery is of the best material, and in good working order.—JAMES PHILLIPS.

Bosom and Cornwall United Mine, May 9, 1857.—According to your request, I inspected this mine on Thursday last, but I shall not trouble you with any lengthened report; suffice to say, I found all your arrangements complete for fixing the plunger lift at the 30, and that the water is in fork low enough to admit of examination of the lode several fathoms below this point, in a winze sunk from the 30 to the 50. I find the lode in the 30 is large, composed of capel, spar, mundin, blende, and copper ore, and for some distance east and west of the winze (Collins No. 3), I value the lode respectively for blende and copper, taking back and bottom into consideration, worth 2d. per fm., and it is evidently improving as it goes down, which taking as it is in 20 fms. of whole ground, shows that you have a source of returns available at a moderate

rate cost, as the ground is very easy, and can be stopped for 1d. 10s. per fm. In conclusion, I beg to state that you have good machinery, and I have no doubt you will have a lasting mine.—THOMAS NEIL.

Wheal Lopes Mine, May 11, 1857.—The obstruction met with in the shaft, above the 30, alluded to in report for the last meeting, has since been cleared and the lift dropped low enough to fork the water 5 fms. below the 30, the lift properly stayed and secured, and footway put in the Footway and Helen's shafts. At the 30, two cisterns were found, one of which being of no service has been taken abroad and sent to a surface, also a large quantity of old timber, the other was found fitting for the plunger lift, only requiring to be altered in its position, ground for which has been cut and the cistern fixed in its place. Ground was also required to be cut down for the H piece, which has been done, and everything in the shaft pit in order to receive the pumps, and every necessary material for the plunger-lift. The 30 has been cleared and secured, so as to admit of examination a short distance east of No. 3 winze, beyond which the levels, winzes, rises, and old workings are in a crushed state, owing to the soft character of the ground; a very limited view only, therefore, has been obtained in this part of the mine, but the lode where seen shows spar, mundin, blende, and black ore, looking very promising. As Capt. Phillips and Nelli have inspected the mine, a reference to their report no doubt will give you an idea of the value of the lode, that no further remarks of mine on it are necessary. The 30 is also driven west, but how far, or what the appearance of the lode is there, is not known, as the level is full of stuff. The lobby to the wheelpit for hauling machine has been excavated, also several fathoms of the wheelpit, and if the ground does not become harder than it is at present, we shall shortly have it ready for the masonry. All the flange bolts, bars, rod bolts, pump rings, are ready for the pitwork, with the rods and other timber on the mine necessary to complete the plunger-lift to the 30. The stamp-house, pitman's house, and office have been completed, with the exception of one more of plastering in the office, which will be put on as soon as the walls are dry enough to receive it, and we are now occupying the buildings. As soon as we get our plunger working, I anticipate we shall soon see the 30, as we have dropped a line and found the shaft clear within 4 fms. of the 60, and as the summer season is before us, we may not expect such heavy and continuous rain, as we last in forking from the 16 to the 30, neither will there be so much work in the shaft to do as there was in forking the upper parts of the mine. The machinery and pitwork in the mine are in good order and working well.—H. HORNSWELL, Capt.

WEST OF IRELAND MINING COMPANY (LIMITED).

Under Act 19 and 20 Vict., c. 47.

Capital £50,000, in 50,000 shares of £1 each, £2,000 thereof to be paid on application for shares, and the balance of £1s. at the expiration of two months from the date of allotment.

The capital to be increased, as the works progress, by subsequent serial issues of shares. The holders of the first issue to have the right of pre-emption of the shares to be afterwards issued.

DIRECTORS.

Lord GEO. HILL, Ballyare, Ramelton; and Gwendore, Dunfanaghy; Co. Donegal; Colonel Sir JAMES STEWART, Bart., Vice-Lieutenant, Co. Donegal, Fort Stewart, Ramelton.

Sir GEORGE EDMUND HODGKINSON, 120, Leadenhall-street, London.

JOHN ALEXANDER, Esq., M.P., Carlton Club, and Milford, Co. Carlow.

WILLIAM DARMAN, Esq., the Tower, Mount Anville, Dundrum, and 74, Harcourt-street, Dublin.

ALEX. J. R. STEWART, Esq., Ards House, Cashelmore, County Donegal; and 18, Belgrave-square, London.

J. R. KNOWLES, Esq., Piccadilly, and Trafford Bank-house, Manchester.

WILLIAM PROSSER, Esq., Northfield Villa, Wanssworth.

J. BISHOP CULPEPER, Esq., 28, Gloucester-Lane, Hyde-park, London.

JOHN BOSS FOOPER, Esq., Acorn Wharf, Rochester.

(With power to add to their number.)

CONSULTING ENGINEER.

John Peterkin, Esq., Bonham Cottage, Waterford.

SUPERINTENDENT OF WORKS.

John Hamilton Clement, Esq., F.C.S., Civil and Mining Engineer.

RESIDENT ACCOUNTANT.—J. Richard Owen, Esq.

SOLICITORS.

London—Messrs. Hancock and Sharp, Tokenhouse-yard.

Dublin—Sir Matthew Barrington, Bart., Son, and Jeffers, 10, Ely-place.

AUDITORS.

Henry George Hadley, Esq., Old Jewry, and 24, Blandford-square, London.

Stephen Neal, Esq., 16, Parliament-street, London.

BANKERS.

London—Messrs. Curries & Co., Cornhill.

Dublin—Messrs. Drummond, 49, Charing-cross.

Dublin—Provincial Bank of Ireland, 61, William-street.

BROKERS.

London—John Metcalfe, Esq., Stock Exchange, and 4, Clement's-lane.

Dublin—Messrs. J. J. Stephens and Sons, Dame-street.

Liverpool—Messrs. H. Davies and Co., Royal Bank-buildings.

SECRETARY.—J. Burns Bryson, Esq.

OFFICES.—1, CHARLOTTE ROW, MANSION HOUSE, LONDON, E.C.

The object of this company is primarily the development of one of the richest and most varied mineral deposits in the British Islands, under the lease, granted by the Marquis of Sligo to Sir James Dombrain, for a term of 21 years, at a royalty of 1-16th, which will be held by this company on very favourable terms. The ultimate object will be the development of the general resources of Ireland, a national association. The area comprised in the present grant is not less than 150,000 acres (more than 200 square miles), and embraces all mines and minerals.

The lands are situated in the western and south-western districts of the county Mayo.

The map and section contained in the report of Mr. Doyle, and the reports of Messrs. Francis, Brett, and Coles, define their position and geological strata. Long Mask is within the area, and the whole is intersected with rivers and streams, so that the water power is inexhaustible, while the sea frontier affords every opportunity for shipment, either by the formation of quays to suit circumstances, or by means of the existing and well-known ports of Killarney and Westport.

That the western coast of Ireland abounds in every description of mineral yield is beyond controversy; but hitherto there has been but limited exploration of its riches. Coal, iron, copper, lead, silver, marble, and slate exist throughout. The iron is equal in quality to the blackband of Lanarkshire, and its marbles, of every colour, are almost without rival.

The cubic lead ore even of this locality contains more silver per ton than is to be found in lead ore of this crystalline form in any other country. The value of the grant is therefore apparent; and nothing but capital and enterprise are required to develop its enormous wealth, which, while proving highly remunerative to the shareholders, must necessarily be of great importance, not only to the district, but to Ireland generally, and in the mineral and general commercial markets of Great Britain.

The geological position and indications of this extraordinary tract of country are so clearly defined in the reports, that it is sufficient to refer to them. Although the description by Mr. Doyle, and those of Mr. Francis, Mr. Brett, and Mr. Coles, are so satisfactory, yet it must be borne in mind that their observations have been limited to a small portion only of this vast estate, there being many thousand acres representing extraordinary features in a geological and mineralogical point of view which have never yet been explored.

The position of this property as respects exports, especially to America and Canada, is a point of great consideration. It is well known that the supply of slate from Wales and Cornwall is not equal to the demand, and vessels are constantly returning to the United States without the desired cargo. In Wales orders cannot be executed under three years at the principal quarries, yet 350,000 tons are quarried annually there alone. This company may monopolise the American trade in this article, and supply all that is required. America will also open a field for a continuous demand for marbles of every description for use and ornament. Nothing but ready transit by railway prevents the ports on the west coast of Ireland becoming rivals of Liverpool in the trade of the United States; and as Ireland is rapidly extending her railroads in this direction, a very important change in the general prosperity of its western districts will be speedily produced.

Altogether this mineral estate presents such varied and important features for profitable development, that it has been determined to commence operations forthwith; the capital at present proposed being fixed at a sum calculated to enable the company at once to prosecute such works as will fairly test the advantages of the property as the progress of the works may demand. It will be observed from the reports, that lead, marble, and slate can be operated upon at once, at an outlay which justifies the expectation of large and increasing dividends from these sources alone, apart from the other valuable metals and minerals in the lands.

The Act of Parliament under which this company is incorporated limits the liability of each shareholder to the amount of the shares held, thus giving to mining enterprise that security to which it is so justly entitled.

The position which British mining takes in the general commerce of the country, is clearly demonstrated by the statistical returns published monthly by the Board of Trade, of the exports of home produce and manufactured articles. In last year, ending Dec. 31, 1856, it appears that the total exports of the United Kingdom amounted to £11,390,537, and of this no less than £27,151,880—a little less than one-fourth—represents metals and metallic manufactures, the produce consequently of our mines. The increase of the total exports during the year 1856, over the previous year, 1855, is £29,202,772, of which £5,119,320 is in the export of metals. Ireland has already begun to contribute considerably to this state of prosperity; and it is undoubtedly that a judicious employment of skill and capital will develop resources in that country, and more particularly in the district above described, as great, if not greater, than those contained in any other portion of the empire.

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The prospectus, the reports above referred to, and forms of application for shares may be had at the offices, or from the solicitors and brokers of the company.

Original Correspondence.

MINE INSPECTORS.

Sir.—Some judicious remarks on mining captains being inspectors have lately appeared in the Journal. It is hardly fair to the mines they manage for these gentry to be so often overburdened by business; they have not time to attend to their own or their employers' interests, as they should do. I have heard of one extraordinary individual, who boasted of having inspected and reported on 100 mines in a month, and on one occasion that he had examined five mines in one day; now, however smart a man he may be, or how close the mines may be together, yet I appeal to any miner whether he could by possibility have given these mines a proper examination? Another person examined the United Mines, Gwent, in eight hours, a feat unparalleled, or impossible; the reason urged was, that he was engaged to inspect another mine, and the gentlemen from "up the country" would be waiting for him. I know another fashionable inspecting captain, who reported on a series of mines in the limestone formation, and had never been on a limestone mountain before. These hasty reports cannot be effective of anything else than extracting money out of the silly shareholders' pockets, as easily as the silly ladies who are votaries of fashion are gulled by new and fashionable bonnet.

Depend on it, Mr. Editor, to examine a mine, ever so small in extent, is a good day's work, provided it be done properly. I hold the duties to be as follow: Ascertain the extent of the sett, direction, and number of lodes discovered, their bearings to the granite, if any exist, as well as their consonance with the neighbouring rich mines; to thoroughly examine the strata at surface, and discover if any change of ground takes place; all this work should be done at the surface of the mine, then examine the machinery, and methods of dressing practised. Underground, the duty should be to examine the nature of the ground in the shaft, and notice particularly any influx of water, the lode to be carefully examined in every place that opportunity offers, as well as the ends and bottoms of every level; to ensure the men at work as to any peculiarities they may have remarked in the course of their explorations; to ascertain and value all the backs and stope pitches; to ascertain the dip and alterations of the lode; to ascertain its composition in all the levels, as well as the variation in their temperature; to make minutes of all these particulars, and, after reading them carefully, to come to a conclusion as to the probabilities of results, keeping analogous circumstances in view. It is wrong either to praise or condemn a mine, and trifles with invested interests, in many cases the "all" of the adventurers, without calm, cautious, due consideration, which I contend cannot be done at the rate of five mines a day.

I was on a mine a short time ago, when the captain was underground with me eight hours. It had been inspected a few days before by a popular captain, who could only spare two hours underground, as he had elsewhere to go. He said he only wanted to see the bottom of the mine, and that was all he did; the strata were not examined, nor were the ends.

This paper will meet the eye of the captain of the lead mine in Devonshire I allude to, and he will remember the agent who went over the mine so rapidly, and framed so condemnatory a report from merely not seeing a good lode in the bottom of the shaft.

Another great evil is created by such hasty reports: they must necessarily frequently be erroneous, confidence is thus destroyed, and the whole lot are written down as humbugs and deceivers.

A thorough investigation of a mine by a qualified person should be well paid for, if made at all: a labourer is worthy of his hire, and to be well served, neither a company nor a private individual should deal out the remuneration with a niggard hand. There are plenty of good men to be had; and, as your correspondent has observed, a good mine more frequently makes a good captain than a captain makes a good mine, so a good practical judge makes a more able inspector than the most fashionable names.—May 21.

GEORGE HENWOOD.

RATING OF MINES.

Sir.—The committee for this iniquitous purpose has again been appointed, Mr. Nicholas Kendall being Chairman; this time it is the royalities that are to be rated, and not the mines. What a farce, what an absurdity is this! The lords having to pay it will, of course, increase their dues, and the consequence will be that many capitalists will be deterred from embarking their money in mining adventures. The lords are not in general known for their liberality, and the Duke of Bedford has only within the last few days shown a notable instance of this. Many mines pay royalties on the ore, which is returning no profit to the shareholders; calls are constantly being made in many mines, and probably just at the expiration of the lease dividends are made. Does the lord then allow them to remain at the royalities? he forgets, or assumes to do so, the immense amount already laid out to make his otherwise worthless property valuable, and according to the rate of profit, when a renewal takes place becomes more exorbitant in his already grasping demands. The mining interest is sacrificed; there is but one man on that committee, Mr. Colville, the Member for South Derbyshire, who I believe really takes an interest in the welfare of the working miner. I consider the question in a practical point of view; why should these experimentalists, who are many of them ignorant of the first principles of mining, be allowed to tamper with the interest of one of the most important and productive industries of the empire? Let these pseudo-legislators apply their attention to subjects of which they have some knowledge; but they should not be allowed to sit in judgment on a question the merits of which they are entirely ignorant of. Although an elector myself, I repeat that at the late dissolution the constituency did not do their duty; in one instance they acted right, in ejecting Mr. Sawle from Bodmin, who stated the county would be better without the mines than with them, that is, as far as regarded his own parish; Mr. Nicholas Kendall, and the other foes of the miner, should not have been returned. Every mine, and all the miners there employed, should petition the Legislature; it cannot be expected that the obnoxious measure can be carried into law this present session. If we have energy we may still defeat our enemies; agitation and union must be resorted to, the metalliferous miners in all parts of the kingdom should combine to prevent this noxious and mischievous attempt at legislation from becoming the law of the land.—Redruth, May 21.

CAPEL.

A SAFETY-LAMP FOR MINES.

Sir.—The recent truly awful accident at Lund Hill Colliery was but a repetition with a fearful increase in the number of victims, and the other additional horrors of the old and too-often enacted tragedy on the world's stage, whose two only scenes are the gloomy coal mine, and a whole village of mourners, weeping for husbands, sons, and brothers, hurried into eternity, with almost the suddenness of the lightning's stroke, and ere they could utter that little word of supplication to their Heavenly Father—that word so earnest in the death-hour, and which is in itself a prayer—"Forgive!" It is over; the curtain has fallen, and shut out from our eyes the painful scene, and there are human hearts, yet unbroken, through whose prompting consolation and relief will reach the bereaved ones, and thus tend to soothe them in their affliction, if not to compensate them for their loss.

Let us turn, then, from the dead to the living—from the victims of carelessness or of inadequate means of protection, which ever may have been the cause of the late accident, and of similar lamentable catastrophes—to those who still toil for the daily bread of themselves and those dependent upon them in our coal mines, exposed as they are every moment, it would appear, to the perils incident to their occupation, and let us ask what can be done to diminish the dangers thus continually impending over them. From all that has been said and written on the subject, we may infer, generally speaking, explosions of fire-damp are not the result of inefficient ventilation, but in very numerous instances are traceable to the use of a candle or lamp. The miner, it is well known, will not use the Davy lamp, if he can possibly avoid it, owing to the insufficient light which it affords. In order that he may not be tempted to open the lamp to obtain a better light, I propose to substitute glass or tallow in the place of the gauze, having satisfied myself, by some experiments which I tried twenty years ago, that flame will not pass through small apertures, whether the conducting power (as regards heat) of the bodies made use of, be good or bad. Indeed, the first material with which I experimented was a piece of cardbord, which I perforated by means of a pin. It then occurred to me to try tallow, with holes drilled in it, so as to admit the necessary supply of air to support combustion. I accordingly procured a Davy lamp, removed the wire-gauze, and supplied its place with perforated tallow. Being placed in an explosive mixture (the vapour of ether and atmospheric air) it answered admirably, the flame of the lamp being extinguished, and the explosive mixture burning quietly, with its characteristic flickering and colour. I found, however, that tallow was objectionable, owing to its laminated structure. But I see no reason why perforated glass, well annealed, might not be used in place of the gauze. This lamp should be protected by a shield of tallow to meet the danger arising from "blowers" of gas. It appears to me that a lamp thus constructed would answer all the purposes of the wire-gauze lamp, at the same time that the light would be unobstructed. To render the lamp still more perfect, I should recommend the use of Mr. Little's "Poor Man's Candle," or "Lamp," which is intended for burning bituminous or paraffine oil. A large solid wick is employed, combustion taking place only on its surface, thus preventing the diffusion of unconsumed carbon, and the charring of the wick; it being stated that one wick will last twelve months.

* This difficulty might, perhaps, be overcome by the use of cement.

Another lamp which may, perhaps, be preferable even to that which I have above described, may be made of imperforated tallow, the air being admitted at the bottom of the lamp, through perforations in any eligible material—plate, for instance—which would be more durable than wire gauze; or, the air might be admitted through small tubes, terminating at their upper extremities just at the point of combustion. In either case, a tallow chimney should be used, so fitted to the lamp that any explosive mixture passing in should come immediately in contact with the flame, and extinguish it.

I venture to indulge a hope that these lamps will, at least, have a trial; and I trust that no individual of that class of speculators who gain their livelihood, and sometimes even attain to a state of affluence, by pilfering the ideas, and thus working with the brains of others, will foil upon the public a lamp constructed, with perhaps some slight alteration, from the foregoing descriptions—craves-like sheltering himself under the mean and paltry subterfuge that they were mere "suggestions."

I have not sought the protection of a patent; for the invention I now gladly and freely thus publicly offer is not a luxury for the use of the rich, but a weapon of defence for the miner in his cheerless and hazardous occupation.

20, Fleet-street, May 20.

W. LEITCH.

SUBMARINE TELEGRAPH CABLES—THEIR SUBMERSION.

Sir.—The telegraphic cable, which is being manufactured for submersion between Ireland and Newfoundland, appears to be an object of some little interest. A great deal has been recently said on the subject, without communicating any definite information relative to the most critical operation connected with the project—the best mode of submerging the cable,—may we, therefore, beg to invite attention, through your valuable Journal, to a plan for effecting that object, which has hitherto been untried. It consists in the use of a "trail," or flexible tube, attached to the stern of the ship, through which a cable may be safely submerged in the deepest ocean in almost any state of the weather. Trails can be constructed in various ways, and, if desirable, be made of the same specific gravity as the cable itself. A wire, or hemp rope, with a light metallic verterated tube in the centre, would probably answer well. It may be partially sustained in the water for the first half mile from the ship by small gutta percha buoys, made in the form of a fishes' float, attached to it at intervals, or by an air-tight gutta percha tube. A strong gutta percha tube, strengthened for the first half mile from the ship with a covering of wire, would, perhaps, also be a good conductor. It should be of sufficient length to reach to still water at a distance from the ship as would place the extreme end beyond the influence of any motion which may be given to the inner end by pitching of the ship, or from any other cause, or it may be of sufficient length to reach to the bottom of the ocean.

The trail being, as it were, part and parcel of the ship, acts as a carrier for the cable, and thus virtually annihilates the distance between the ship and the bottom of the ocean, or still water, except to the extent of the friction of the cable in the tube; and as the motion of the extreme end of the trail would be steady and uniform in its passage through the water (the speed of the ship being uniform, however unsteady its motion), the delivery of the cable would also be steady and uniform; and as the cable cannot enter into the tube at the upper end than it is passing out of it at the lower end, it follows that any strain which otherwise would be thrown on the cable at its point of contact with the ship from any cause whatever, would be borne by the trail itself, instead of by the cable. In fact, the cable in its passage through the tube is completely protected from any strain, and from all circumstances which might be injurious to it.

It may readily be seen that, if a trail be submerged in a vertical position, the cable would pass through it without any strain at the lower end; it would be in this position to require a brake at the upper end to prevent its too rapid progress. It is equally obvious that, if the trail be placed in a horizontal position, the cable would require some force at the outer end to draw it through the tube, and consequently would not require a brake at the inner end to check its progress. It follows, from these two self-evident facts, that there is a position between the vertical and the horizontal, in which the cable would deliver itself without any strain at the lower end of the tube, and without requiring any brake at the upper end. To obtain the proper deceleration for the trail, it would be only necessary to ascertain the velocity at which the cable would sink in the water, and after making due allowance for the increasing or diminishing speed of the ocean as the ship advances, to regulate the speed of the ship accordingly.

The friction of the cable in the tube would act as a brake, with the great advantage of its operating throughout the entire length of the tube, instead of on a few yards or fathoms of the cable on board the ship. If a trail be used, it would, of course, be absolutely necessary to guard against kinks in the cable; but viewing the description of cable in question, and the abundance of manual labour which, under the direction of skilful judgment, may be employed on the occasion, there need scarcely be any fear in that particular. The cable should not be encumbered with many mechanical arrangements on board ship, perhaps the less the better.

If submersion of a cable is made from the centre of any ocean towards shore, the "trail" (if a metallic one) may be disconnected from the ship on her arrival in shallow water, and allowed to sink with the cable. It would thus afford that protection which the cable so circumstantially will require. Without enumerating all the advantages which would attend the use of a trail, it may be well to observe that its adoption will enable a comparatively inexpensive description of cable to be used, a great strength need not be required—the insulation of the telegraphic wires would perhaps scarcely need any other protection in deep oceans than would be necessary to prevent abrasion in its passage through the tube.

WILKINS AND WETHERLY.

39, Wapping, May 19.

TEMPORARY RAILWAYS, OR TRAMWAYS FOR THE COLO-
NIES AND NEW DISTRICTS.

Sir.—Your Journal of March 21 contained an article on the economy of tramways worked by horse-power, over railways and locomotives, for the colonies or thinly-settled districts, in which there occur so many erroneous assumptions as to the cost of locomotive power, that the results obtained, and the deductions made, are altogether at variance with the facts. The same paper contains an advertisement of a tramway company for India, and looking at the two together, it would appear that a very erroneous impression is being conveyed as to the cost of colonial railways generally, and of what tramways may be in particular; believing, as I do, that tramways, or light railways, may be made very much more profitable than railways in many situations, both in England and the colonies, and hoping that some cheaper system may be introduced into what must remain otherwise neglected districts, has induced me to look closely both into the article in question and the company's advertisement.

The experience of a railway 26 miles long in a prosperous colony, and where there are 10 persons per mile, is taken as an illustration of the inability of constructing expensive roads with locomotives. "There were," says the writer, "three engines on the line, which cost 12,700£, and by adding the interest that had accumulated, their actual cost was taken at 4500£ each." Now, Sir, this is a price for locomotives on colonial railways utterly unknown. It is true that, in paying for rolling stock in the depreciated bonds of a nearly insolvent company, such a price may have been given, but I think not: 2000£ sterling is an outside price for a locomotive to suit any such road as the one referred to. Colonial engines are unfortunately too large and powerful for shareholders' pockets, being generally exactly the same size and power as the largest engines on main trunk lines in older countries, and intended to make up for the deficiency of bad roads and heavy gradients by extra power and adhesion. The same line would give its bonds for a double price for an engine would be compelled to do the same for horses, or any other requirement, so that the comparison is unfair. "English experience," continues the writer, "has established that 36,000 miles is the average work an engine will perform; therefore, if one engine were to do all the work on the line, it would be worn out in a year and a half," thus showing 3000£ per annum for replacement of engines. Thirty-six thousand miles is undoubtedly a good annual performance of a locomotive; though English experience often shows a very much higher performance of single engines, and that too for years together; and engines have averaged over 25,000 miles for 10 or 12 years. Perhaps 24,000 miles for 10 years, or 240,000 miles, may be taken as the average in England, and of course this may be expected with ordinary roads in the colonies. The Wango and Old Town Railway, in the State of Maine, was opened with three locomotives in 1835, and up to last year these did all the work, performing a heavier annual mileage than the case supposed; two of these engines were built by Stephenson, of Newcastle, the other an American, and they are all running yet, now 24 years old, having averaged about 400,000 miles each: these engines cost about 800£ each. Assuming, however, the cost of a locomotive at 2000£, its mileage at 240,000, and the mileage of the road mentioned in the articles referred to at 24,000 per annum, the locomotive will last 10 years, and its annual depreciation will be 200£, not 3000£, or 13s. 4d. per day. "The casual repairs, renewal of boiler-tubes and fire-bars, with maintenance of the rest of the rolling stock, would be a still greater source of expense," and is estimated at 3000£. It actually is on exactly a similar line to the one referred to—66 miles of locomotive power 31s. 5s. 4d. per day.

The next assertion is the cost of haulage, which is given at 4s. 6d. per mile. This is so enormous that it must include other items of expense. Exclusive of repairs, it cannot be over 1s. per mile for fuel, oil, and wages of drivers, &c. This is, in fact, the general cost where fuel is scarce and dear, and skilled labour expensive; and certainly on this continent the figures stated are about the average, making a total cost of locomotive power of 1s. 8d. per mile, including 2d. for depreciation, which is rather over the mark. If to this you add the interest at 10 per cent., as assumed by your correspondent, on (say) two engines and other stock at 6000£, and we have 2s. per day, and 104 miles at 1s. 8d.=8s. 13s. 4d.: making a total cost of haulage per day equal to 104 miles at 2s. per mile, or the mileage mentioned 104 miles per day=21. 12s.: making the total cost of locomotive power 31s. 5s. 4d. per day.

The next assertion is the cost of haulage, which is given at 4s. 6d. per mile. This is so enormous that it must include other items of expense. Exclusive of repairs, it cannot be over 1s. per mile for fuel, oil, and wages of drivers, &c. This is, in fact, the general cost where fuel is scarce and dear, and skilled labour expensive; and certainly on this continent the figures stated are about the average, making a total cost of locomotive power of 1s. 8d. per mile, including 2d. for depreciation, which is rather over the mark. If to this you add the interest at 10 per cent., as assumed by your correspondent, on (say) two engines and other stock at 6000£, and we have 2s. per day, and 104 miles at 1s. 8d.=8s. 13s. 4d.: making a total cost of haulage per day equal to 104 miles at 2s. per mile, or the mileage mentioned 104 miles per day=21. 12s.: making the total cost of locomotive power 31s. 5s. 4d. per day.

The calculation of cost by horses is equally unfairly stated, no drivers' wages being included, and no provision being made for harness and equipment; instead of 8s. 4d., this will be found to be 10d., or 50 per cent. more expensive than locomotives.

Now, Sir, on the subject of tramways. I should have with great satisfaction the introduction of any cheaper description of road than the present railway. Not only in the colonies, but in many agricultural districts, and thereby settled parts of England and Ireland, some cheaper railway is a desideratum, and India certainly presents a great scope for their development: but the introduction of horses instead of locomotives is a retrograde step, and not calculated to lead to anything but confusion and difficulty. The earliest railways in America, which averaged in cost about 2000£ per mile, now known as the stage-road, failed from their want of durability, and the difficulty of executing repairs and renewals, and a cheap iron superstructure, with plain wooden sleepers where wood is plentiful, and cast-iron where it is not, is still to be introduced. The cost of keeping up a road for horses is very much more than for light locomotives, as the action of the horses' feet has a continual tendency to pack up the middle of the sleeper, and leave them unsupported at the ends. The weight of the passing train must then either break the sleeper, or oscillate on the middle of the road, increasing the expense of repairs, and not unfrequently bending the rails and breaking the spikes. The additional expense of bridging is also heavy, the locomotive requiring neither a flooring nor hand-railing, whilst the cheap arrangement in America for crossing swamps, and low land for saving embankments, and preserving the line from the effects of inundations, the scaffolding, or trestle-work, as it is called, is necessarily inadmissible.

In constructing some of the American lines, where heavy works have required to be removed for the permanent line could be possibly laid up to them, a form of temporary railway or tramway has been used, which can be put down very cheaply and answers perfectly well. The rails are from 15 to 18 lbs. per yd., the inverted Δ shape, with holes punched in the outside flanges, and 16 ft. long. The sleepers used were 15 ft. planks, 9 in. wide, and 3 in. thick. On ordinary ground, one longitudinal plank, laid so as to bring the joint of the rail in its middle, and one cross-slab, 5 ft. long, in the middle of the rail, were laid down, and the rail spiked on it, which bound all together. In very wet places the planks were laid side by side diagonally (to save sawing) 7 ft. 6 in. long, and the rails spiked on them, like a plank road. The cuttings that could not be avoided were cast out, leaving a trench 7 ft. wide, with a drain down the middle, and the embankments were "cobbled" up to 6 feet, and treated above. The cob-work is simply an arrangement of logs, alternately longitudinal and transverse, one tier above the other. The trestle-work is a series of framed or piled bents,

15 ft. apart, surmounted by longitudinal stringers 12 in. deep, on which the rails are spiked. The gauge is 4ft., and the power locomotive. Such a line as this can be put down for 1000£ per mile when rails cost 12s. per ton, and sawn timber 2s. per thousand and feet, board measure. The locomotives in use on this road, for moving the earth-work and ballast, had four coupled 3 ft. wheels, weighed in working order 6 tons each, and cost about 700£ a piece. Temporary wheels were fixed under them, to move them from place to place, and the other wheels substituted when they were put upon the rails. On such a road as this, passenger carriages would require to have the double truck, or eight wheels, and could be made comfortable for 40 passengers each. A working speed of 10 miles per hour could be maintained; the working expenses per train per mile would be about 2s., and the cost of keeping the road in repair would be about 30s. per mile per annum. The construction of the line in question in the north of India would be, I think, undertaken by contractors accustomed to the cheap expeditions of American railways, for not over 1500£ per mile for a tramway, or 3000£ per mile for an ordinary railway, with rails 40 lbs. per yard, and gauge 5 ft. or 5 ft. 6 in. The introduction of horse-power, and the consequent requirement of a well-ballasted road, filled up to the level of the rails, would, of course, cause an additional expense; but the idea of spending 5000£ per mile on a line only partially applicable to the locomotive, is to our American ideas somewhat extravagant. One great advantage of reducing the gauge to 3 ft. is, that an ordinary railway can be laid down over it without interfering with the working of the intermediate tramway, and the materials of the latter when superseded can be taken up and used elsewhere, to open up another district, and develop the traffic to justify the more expensive construction of the railway.—Frederick, New Brunswick, May 1. T. T. V. S.

ON GOLD AND SILVER EXTRACTION.

Sir.—With reference to my communication, some weeks since, of which a notice appeared in your Journal, and which intimated the success of my new solution-treatment for desulphurising mineral ores, as shown by assays taken on the metallic residue of a quantity (about 220 lbs.) of matrix, prepared by washing and grinding, and then operated on by that process; those assays having certified to a yield equivalent to 400 ozs. of fine silver per ton of pyrites, produced on the average by 3 tons of like ore, I should now have apprised you of the chief matter-of-fact desiderated in the case by the proprietors of this mine, the Wheal Samson, in Cornwall, which yields ore of the same quality in abundance—namely, the real out-turn in bars of silver obtained from the 30 cwt. so treated, but for the want of apparatus to be found in London for reducing such argentiferous ore, or pyrites, in a granulated state, as my process leaves

subscribers of your influential Journal, most of whom are, I believe, made subject to the conditions of about the worst framed Act in the statute book—the Joint-Stock Companies Act.—Jamaica Coffee-house, Cornhill, May 21.

JAMES STRIDE.

NORTH WHEAL VOR (BREAGE, CORNWALL).

Sir.—In your Journal of the 9th inst. my attention was drawn to a melancholy accident and loss of life, occasioned by the bursting of a boiler on this mine, and causing, as then estimated, loss of the adventurers of about 4000. From authentic information I have since received, I find the cause to have been the neglect of the engineman in feeding the boiler, and which terminated so fatally to himself and two others, at the same time seriously injuring two men then also on the premises. The effect of the accident was the immediate stopping of the mine, the water having risen very rapidly throughout the several levels; but it is worthy of record, and of great credit to the agents and men, to find that by their united energies the damage was repaired, and the engine again at work at the expiration of ten days from the accident, and at a cost of 1000, less than first estimated. Within five days the mine was in full; on the sixth the several contracts and bargains were set, and the workings throughout the mine resumed. In making my inquiries, I took the opportunity of ascertaining that the progress and prospects of the mine were most satisfactory, and the adventurers appear to have much reason to be indebted to the unceasing attention of their purser (the promoter of the concern), who has evidently shown great ability in directing their interests. Great credit is also due to the agent (Capt. White) for the experienced and energetic manner the company's works have been laid out; and it must be gratifying to the company to find their annual sales of tin progressively increasing, and that a necessity has arisen for additional stamps, in course of erection, to be supplied by tramways now being laid down; and it is fully expected, from existing appearances, that the present year will place the mine in a profitable position. A SUBSCRIBER.

NATIONAL BRAZILIAN MINING ASSOCIATION.

Sir.—I am rejoiced to find that our prospects appear so encouraging, and hope that a large dividend may speedily follow the present cheering intelligence; in the mean time, will you, with your usual courtesy, permit me to make a few remarks, which, as I have a not contemptible stake in the concern, and having had considerable experience in matters relating to Brazil and its laws, may not be altogether uninteresting to my fellow-shareholders.

Possession has been gained of all the properties—excellent news!—but a moment's consideration prompts the query, is it a possession legally secured and consolidated with the original title-deeds in our hands, and the judgment of a Brazilian court in our favour? If so, has the manager and receiver placed a notarial copy of the *acte de possessão* on the table of the office, or is he a mere dummy? Or, is it that Mr. Hitchins, who has been admitted, and resides on the properties—in plain language, the victim of a *raze* practised by those who, being left in charge by Mr. Oxenford, deemed it a profitable opportunity to throw the burden of expenses, and their own salaries, on the shoulder of his opponent. Are our legal advisers so ignorant as not to know that a summons on Mr. Hitchins, before a neighbouring *jus de paix*, to produce titles, which, if he does not possess, may be followed by an immediate ejection; and that when more money has been spent, improvements made, machinery erected, and gold extracted, the whole may “at one fell swoop” fall into the hands of Mr. Oxenford. I ask again, are our legal advisers so ignorant as not to know this, or knowing it, are they laughing in their sleeves, and pocketing the fruits of our credulity?

It is very satisfactory to find that Mr. Oxenford, instead of being a large creditor, is now reported to be a debtor to the association. Assuming such to be the case, I am astounded that the enquiry he courted, and the offer that he made of settling all by arbitration, has not been eagerly accepted. How is this? An explanation would be very satisfactory; as would also information upon several other points, among others, as to the employment of the funds of the association, which, with the sum obtained from the recent ex'l, and the 12,000£, secured, must be now in a most flourishing condition. In conclusion, I trust that all this good news may be really good; that legal and undisputed possession of the properties has been gained; that 12,000£ has really been secured; that Mr. Oxenford is indeed a debtor instead of a large creditor; and that the drain caused by law expenses is now finished. But, Mr. Editor, I own that my heart sometimes misgives me; the golden prospect doth oft appear to me dim and shadowy, and the dreadful supposition arises, that, after all, this may prove to be but another squeak from my old friend “the pig in a poke.”

Leeds, May 20.

A SHAREHOLDER SINCE 1835.

PORT PHILLIP AND COLONIAL GOLD MINING COMPANY.

Sir.—Having seen, in your Journal of May 9, five lines of meagre extract from the last despatches of Mr. Bland, the managing director at Melbourne of the above company, with reference to certain new contracts he had entered into to erect a quartz-crushing establishment at a place called Clunes, and also to take on lease certain mineral ground there; I called at the offices in Gracechurch-street yesterday, in order to read the despatches, and judge for myself as to the probable results of this new move of our directorial manager, who hitherto has so miserably failed in all his new schemes, on behalf of the company. As I expected, however, a perusal of the despatches was refused; for I have invariably found, both at the Port Phillip and Marquette offices, that the office practice is just the reverse of what the Chairman says it is, when questioned at a public meeting, it being his custom then to represent that every facility is afforded to shareholders requiring information as to the affairs of these companies.

I think, however, I may safely promise my fellow-shareholders that another requisition will shortly be sent in, to require the calling of an extraordinary general meeting; and I also think I may with equal safety promise that this time the tenor of the requisition will not be misstated, as it was last year, in the official notice issued by the board in order to call such meeting; because the proceedings I recently took in the Westminster County Court against the Chairman of our company, in order to recover the costs of a counter advertisement, rendered necessary by that official misstatement, were put an end to by the defendant paying into court, on the morning of the day on which the cause was set down for hearing, the full amount claimed, together with costs.

You will, I am sure, confer a favour on many of the Port Phillip shareholders resident in the country (who chiefly consult your Journal for information as to the state of the company's affairs), by inserting this letter, and at the same time oblige—

15, Charles-street, St. James', May 20.

CHRIS. RICHARDSON.

Meetings of Mining Companies.

NORTH DOWNS MINING COMPANY.

A general meeting of adventurers was held at the office, Threadneedle-street, on Wednesday, Mr. P. D. HADOW in the chair.

Mr. DUNSFORD (the secretary) read the notice convening the meeting.

A statement of accounts for four months, to March 31, was submitted, from which the subjoined is condensed:—

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| Balance last audit | £830 11 5 |
| Mine cost, Dec. to March | 1159 15 9 |
| Merchants' bills | 460 9 9 |
| Lord's dues | 26 14 10 |
| Balance of interest account | 33 11 11 = £2511 10 8 |
| Calls received | 938 15 0 |
| Ore sold | 347 16 1 = 1286 11 1 |

Balance against adventurers £1224 19 7

Reports were read from Capts. Chas. Thomas, Thos. Trevillion, and John Prince, from which the following is abstracted:—

The mine is being worked with good judgment and economy, so far as can be with the present number of men. I need not say that if funds are available it will be more economical to employ as many men in opening the mine as the several points require, than to employ a smaller number of men, requiring a longer time to accomplish the same work. By energetic and persevering working the mine will probably be found of value, especially at deeper levels.

The set is about 800 fms. in length and a quarter mile wide, and embraces several lodes, but the main lode in operation at present is the lode referred to, North Downs or main lode; and the present workings are at the eastern end of the set, where they have, in about 180 fathoms in length, three large cross-courses, which intersect the lode at almost right angles. It is stated that there are some good bunches of copper ores gone down in the bottom of the 20, and especially in a winze, which is down 7 fms. under the level; but, there being so much water in the level and winze, it was impossible for me to see it. The 10 is driven east from Bennett's shaft 36 fms., and for nearly 20 fms. through a productive lode, yielding on the average about 12, worth of copper ores per fm. At present the lode in the end is disordered by a slide, which is a common occurrence in this mine, and an improvement is again shortly expected. The set, on the whole, presents favourable indications. Although at present the returns are small, they will nearly meet half of the current costs; but ere long you may expect an increase in the returns. There is a lode south called the Coal-yard lode, and a cross-cut has been driven towards it for a considerable distance, and 15 fms. more would reach it; this point is doubtless an important one, and such work might be done for a trifle; and it might discover a good lode. Capt. Trevillion strongly recommends that it be immediately resumed. On the whole, the mine is comparatively inexpensive, and the work in operation is as it should be to prove the mine effectually, which it is hoped will be continued with vigour.

At Peover, we are working on a limited scale, but to a profit. We have not the proper means of returning the tin in sufficient quantity to make this part of the property pay as well as it would do. It is to be set in a rough state it must be done at a great sacrifice. Should North Downs turn out, so good during the next six months as the present indications justify us in anticipating, it will be necessary to erect a winding-engine, to save the great expense of horse hire, when a crusher and stamping apparatus might be attached, and Peover cannot fail to pay well for the amount expended. The present returns will be from 600, to 1000. worth of tin a month. The engine works well, and keeps down the water by going 4½ strokes a minute.

Mr. DUNSFORD read the following report from Capt. Prince, which brought up the state of the mine to the latest period:—

May 16.—I beg to report, for your information, that the 30 end east has passed through the cross-course, and should the flookey maintain its usual dip, we shall in a few days reach it. The ground is improved, and so is the part of the lode seen; but, as we have stated in our former reports, nothing good can be expected before the lode is met with, immediately to the east of the 30. The ground in the 20 cross-cut is improved, and the price is reduced from 7½ to 5½ per fm. We cannot now be far from the eastern cross-course (see plan), in intersecting of which we anticipate that the lode will be drained in the bottom of the 10 to the east of Bennett's. No alteration has taken place in the eastern rise in the 10; but in the western rise, behind the stopes, we have met with talcose slate, in which the lode never fails to be productive. Should this formation, therefore, continue, good results in the rise will be realized. The lode in the 10 west continues small, but the ground about it looks well. At Peover's, no lode has been taken down during the past week. We shall sell the parcel of tin ore on Saturday next.—J. PRICE.

Mr. DUNSFORD observed that, since the accounts were made out, there had been a small sale of tin-stuff, which had realized 371. 16s. 5d., and which would come into the next account. Assuming that all the calls had been paid up, they would have had a balance in favour of adventurers of 1000£. The next cost-sheet would be about 4000£, as it would include the tribute balances.

The CHAIRMAN, in moving the adoption of the reports and accounts, wished to impress upon the shareholders the necessity of supplying them with the means of paying the next cost-sheet, as he would not put his name to any more bills, and they had been going on from hand to mouth for a long time, the calls never having been made until they had previous liabilities to the same amount to discharge, leaving nothing to go on with. If the calls in arrear were now paid, they would have a certain sum of money to carry on operations; and upon the next occasion they would consider

the further amount necessary to raise to work the mine vigorously. The bills he had referred to as signed by the committee were not the ordinary ones drawn by merchants, but by the purser to pay the labour cost.—The Chairman then submitted that the reports and accounts be received and adopted.

Mr. BIRDSEY seconded the resolution, which was unanimously carried.

The CHAIRMAN said the next question was regarding the forfeited shares, and it was considered a limit should be put upon the time of issuing them, and that they should be distributed amongst those that paid the call now due. The number of forfeited shares were 191, and it was proposed to issue them *pro rata*, at 1/- each, to such of the shareholders who paid up their call on or before June 1 next, at which price they would be a bonus; but so long as they were known to be on hand, they were calculated to keep down the market. The following resolution was then submitted:—

That the 191 forfeited shares be offered to the shareholders at 1/- per share, in the condition of one forfeited share for every ten shares held by them, on the condition that the applicants for the same shall pay for such shares, and also the call due from them, on or before the 1st day of June next.

Mr. ASHLEY seconded the motion, which was unanimously adopted.

The CHAIRMAN next proposed that after June 1, in the event of any of the shares remaining on hand, the committee be authorized to offer them at the same price to those who had paid.—Carried unanimously.

Mr. DUNSFORD observed that the report from Capt. Trevillion was very favourable indeed, he rarely found, from so young a mine, three reports so satisfactory. All the reports recommended the resumption of the cross-outs, which they had been kept back from doing through poverty.

Mr. CUMMING considered it advisable that they should have a little more local supervision, as they were principally London adventurers; indeed, he believed there were only one or two residing in the neighbourhood, who had recently joined. He believed Capt. Prince had done the best in his power; but he would recommend that Mr. Francis Pryor, of Redruth, be appointed the local manager, as he would undertake the duties for a small sum, and was resident within a mile and a half of the mine.

Mr. BIRDSEY was of opinion that if Mr. Pryor was appointed the manager of the mine, to see that the operations were carried on for the benefit of the shareholders, it would strengthen the hands of Capt. Prince, and give great satisfaction to the adventurers.

After a lengthened discussion, the appointment of Mr. Pryor was unanimously carried, and a vote of thanks to the Chairman terminated the proceedings.

KELLY BRAY MINING COMPANY.

The quarterly general meeting of shareholders was held at the offices, 27, Austin-friars, on Thursday, Mr. FIELD in the chair,

Mr. KING (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.

The financial statement from Jan. to end of March was produced, from which the subjoined is condensed:—

| | |
|------------------------------------|------------------------|
| Labour cost, Jan., Feb., and March | £1394 2 4 |
| Merchants' bills | 564 15 1 |
| Lord's dues | 149 5 1 |
| Balance of steam-engine | 500 0 0 |
| Merchants' bills up to January | 1450 18 11 = £4059 1 5 |
| Balance in hand last audit | £643 16 4 |
| Back carriage | 62 14 7 |
| Call made, and arrears of call | 405 13 0 |
| Sales of ore | 1648 7 0 |
| Income tax | 7 10 11 = 2768 3 10 |

Balance against the mine £1290 17 7

The following report, from Capt. M. Edwards, was then read:—

May 19.—Since last general meeting, the 100 fm. level has been driven 7 fms. 4 ft. 6 in., and is now extended 45 fms. from the shaft, and 15 fms. east of the winze shaft from the 90; the lode in the end at present is about 2 ft. wide, composed of peach, fluor spar, muriac, and stones of copper ore, looking very promising, but not sufficiently rich to value. It has, however, recently been showing strong indications of a near approach to a course of copper ore, particularly in the back of the level, where the first improvement is naturally to be looked for, as a shoot of ore is gone down to the bottom of the 90 fm. level; but as doubts have been entertained whether a part of the lode or a branch has not gone off south, we commence driving a cross-cut in that direction in the 100 fm. level, behind the end, to prove it. This is now extended nearly 2 fms. without meeting with anything of consequence; in the last foot or two, however, we have been intersecting small branches of spar containing spots of muriac and copper ore, which induces us to think that a branch or the south lode is still before us, and at no great distance. An improvement having taken place in a pitch in the back of the 90 fm. level, behind the end, to prove it. This is now extended nearly 2 fms. without meeting with anything of consequence; in the last foot or two, however, we have been intersecting small branches of spar containing spots of muriac and copper ore, which induces us to think that a branch or the south lode is still before us, and at no great distance. An improvement having taken place in a pitch in the back of the 90 fm. level, behind the end, to prove it. 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At the North Buller Mine meeting, on Monday (Mr. W. Barclay in the chair), the accounts showed—Balance last audit, 441. 14s. 1d.; mine costs and merchants' bills, January, 1804. 5s. 10d.; February, 2321. 6s. 2d.; March, 1781. 0s. 2d.; 631. 10s. 7d.—Calls received, 4921. 12s.; leaving balance against mine, 2311. 18s. 7d. A call of 10s. per share was made. Capt. Joseph Vivian reported that the ground of his has improved for exploring; consequently, they expect to reach the 80 fm. level previous to the next quarterly meeting.

At North Pool meeting, the accounts for Jan. and Feb. showed—Balance from last audit, 16241. 13s. 2d.; costs and merchants' bills for Jan. and Feb., 1493. 18s. 7d.—Calls received, 3191. 0s. 9d.—Ores sold, 9821. 10s. 1d.; leaving balance against adventurers, 21861. 0s. 10d.

At Camborne Consols meeting, on Wednesday (Mr. T. Bushell in the chair), the accounts showed—Balance from last audit, 1081. 10s. 7d.; calls received, 3041. 10s. 1d.; ore sold, 4451. 17s. 1d.;—mine cost and merchants' bills, Dec., 2351. 13s. 9d.; Feb., 2322. 14s.; March, 2342. 18s.; sundries, 161. 17s. 2d.; leaving balance in favour of mine, 2351. 18s. 10d. At the next meeting the advisability of increasing the number of shares will be considered. Capt. Wm. Roberts reported the prospects of these mines had improved within the last two months. They calculated on sampling about 40 tons of good ore on the 27th inst.

At South Corn Brae Mine meeting, on Wednesday (Mr. J. le Breton in the chair), the accounts showed—Calls received, 5481. 9s.; ore sold, 1581. 0s. 8d.; 768. 2s. 4d.—Balance last audit, 241. 12s. 2d.; mine cost and merchants' bills, Feb., 2461. 18s. 9d.; March, 2761. 7s. 6d.; sundries, 121. 19s. 2d.; leaving balance in favour of mine, 1671. 12s. 10d. A call of 2s. per share was made. Capt. T. G. Glanville reported that the lode in the present 25 end was 4 feet wide, composed of spar, mixed throughout with grey ore, green carbonate, and red oxide of copper, with every indication of improvement; the 45 west is producing good stones of ore occasionally.

At Wheal Ludcott meeting, on May 13, the accounts showed—Balance last audit, 7451. 17s. 1d.; mine cost, 10801. 13s. 6d.;—merchants' bills, 9861. 0s. 6d.; dues, 316. 16s. 4d.;—calls received, 24861. 12s. 4d.—Calls received, 12001.; ores sold, 4821. 14s.; leaving balance against mine, 11031. 18s. 4d. A call of 5s. per share was made. Captains R. Knapp and J. Husbank reported that they were preparing two parcels of lead for the market—30 tons of crop, and from 20 to 25 tons of seconds, which they expected would be ready in eight or ten days, and with 30 tons more of crop which they hoped to raise in about seven weeks, ought to realize sufficient to meet current cost for the next three months. If the lodes in the 30, north of flat-rod shaft, open up as favourably as the prospects indicate, they will be able to pay costs, until some further improvement enables them to advance beyond it.

At East Gunnis Lake and South Bedford Consols meeting, on Wednesday, the accounts showed—Mine cost, merchants' bills, &c., 8382. 6s. 10d.; dues, 1511. 0s. 6d.; office expenses and sundries, 171. 19s. 5d.;—mine cost, 9761. 14s. 6d.; dues, 241. 18s. 4d.;—calls received, 1661. 0s.; ore sold, 3461. 18s. 1d.; leaving balance against mine, 311. 1s. 1d. The estimated balance of payments over receipts before the next meeting was 4031. 1d. A call of 2s. 6d. per share was made. Capt. J. Wolferstan reported that the mine was not as yet in such a state as to enable them to speak confidently respecting the returns, but they hoped ere long to make it pay out, and relieve the shareholders from further calls. Their present prospects were equal to about 500s. worth of ore every two months, against cost of about 2751. monthly.

At Kelly Bray Mine meeting, on Thursday (Mr. Field in the chair), the accounts for three months ending March showed—Labour cost, Jan., Feb., and March, 1841. 2s. 4d.;—merchants' bills, 5641. 15s. 1d.; the dr's dues, 1491. 18s. 1d.; balance of steam-engine, 5001.;—merchants' bills up to Jan., 14501. 18s. 1d.;—40591. 1s. 6d.—Balance in hand last audit, 6431. 18s. 4d.; back carriage, 621. 14s. 7d.; calls made, and arrears of call, 4051. 15s.; sales of ore, 16481. 7s.; income tax, 71. 19s. 1d.; leaving balance against the mine, 12901. 17s. 7d. A call of 5s. per share was made, which it was hoped would be the last. A special general meeting was called for June 4, to forfeit all shares on which any arrears of calls may remain due. The committee of management and auditors were appointed; and the meeting, the proceedings of which are detailed in another column, terminated with a vote of thanks to the Chairman and committee of management.

At Great West Sortridge Mine meeting, on May 14 (Mr. W. A. Thomas in the chair), the accounts from October, 1855, to April, 1857, showed cash balance of 161. 0s. in favour of adventurers. A call of 2s. 6d. per share was made. Capt. James Richards fully reported on the mine, adding—“The operations, as far, have been rather slow, in consequence of the hard and wet nature of the lode; the machinery, however, both at surface and underground, being complete, the sinking of the shaft, &c., will, we hope, now go on without interruption; and, as above observed, I have every reason to believe the prosecution of this promising lode will lead to good results.”

At West Sharp Tor Mine meeting, on May 14 (Mr. Thos. Morris in the chair), the accounts from Dec., Jan., and Feb., showed a cash balance of 1351. 3s. 2d., and arrears of calls 4351., with liabilities amounting to 8041. 0s. 10d. A call of 5s. per share was made; and at a special meeting, to be convened for the purpose, all shares in arrear are to be declared forfeited. The new lease of the scut for 21 years, obtained (for 261. 5s.) in the names of Messrs. W. A. Thomas and Thos. Morris, from the Duchy of Cornwall, was accepted on behalf of the adventurers. Capt. W. Richards, after reviewing the whole of the circumstances connected with the adventure, sees no reason to retract or modify any statement previously made, respecting its ultimately becoming very productive.

At the Old Tincroft Mine meeting, on May 12, the accounts from Oct. to March showed—Balance last audit, 617. 2s. 7d.; mine costs, six months, 1671. 14s. = 2281. 18s. 7d.—By the scut (less dues), 2121. 15s. 6d.; leaving mine in debt, 161. 1s. 1d. Capt. John Williams (Wheat Margaret), B. Champion (Reeth Consols), M. Curnow (Wheat Mary), W. Hollow, jun. (Providence Mines), W. Stevens (Wheat Keeth), and M. Trewella (Old Tincroft), consider that this mine is in one of the best tin districts in Cornwall, adjoining (and on the same lodes) two very rich mines—Wheat Margaret and Wheat Mary—and that being a dry mine 60 fms. from surface, being drained to the 40 by Wheat Margaret engines, it is one of the best speculations in the neighbourhood. On their recommendation, the meeting resolved that the 20 be driven south-west, Dymond's shaft cleared to the bottom, and the cross-cut driven south in the adit to cut the south lode.

At Wheal Lopen bi-monthly meeting, on May 12, the accounts showed—Labour cost, four months, 1241. 12s.;—merchants' bills and machinery, 5181. 14s. = 931. 6s.—Available balance, 4801.; capital called up, 7501. = 12341.; balance carried forward, 2361. 14s. In another column, the reports of Mr. W. H. Mortimer, managing director, and of Capt. James Phillips, Thomas Neill, and H. Horwood, the agents, will be found in *extenso*, and which should be carefully perused by all who are interested in the success of this well-conducted adventure.

At the Caravat United Mining Company meeting, on Wednesday (Dr. Beattie in the chair), the accounts showed balance against adventurers, 6991. 15s. 3d. A call of 5s. per share was made. The proceedings, which are fully detailed in another column, terminated with a vote of thanks to the Chairman.

At Gawton Copper Mining Company meeting (Mr. S. Broad in the chair), the accounts showed a balance in favour of adventurers of 791. 3s. 3d. Resolutions were passed that the qualification for a member of the committee of management should be the holding of 50 shares; that Messrs. W. M. Chambers, J. Robertson, S. Broad, B. Seward, and J. E. Mathew be appointed the committee of management. A vote of thanks to the Chairman and secretary terminated the proceedings.

At Penestruthol Mine meeting, on May 15, the accounts showed—Balance last audit, 7861. 15s. 10d.; mine costs and merchants' bills, Feb., March, and April, 7961. 18s. 8d. = 15831. 15s. 6d.—By call received, &c., 12001. 7s. 9d.; leaving balance against adventurers, 3741. 4s. 9d. A call of 6s. 3d. per share was made.

At Wheal Venton meeting (Mr. F. R. Wilson in the chair), the accounts showed—Balance of liabilities over assets 3631. 6s. 9d., and a call of 2s. per share was made.

At Barriow Consols Mine meeting, on Tuesday, the accounts showed—Balance last audit, 1811. 10s.; mine cost, 1511. 4s. 5d.; merchants' bills, 3671. 4s. 6d. = 3181. 18s. 11d.—Calls received, 2501.; leaving balance against mine, 691. 18s. 11d. Capt. H. Taylor reported that they had plenty of water at present for their water-wheel, and, should they require more in summer, they have leave to take in another stream. A call of 11. per share was made.

At the Bampfylde Copper Mining Company second half-yearly meeting, at Liverpool, on the 13th inst. (Mr. W. Vallance in the chair), the accounts from Nov. to April showed—Balance last audit, 13421. 5s. 7d.; copper ore, 4921. 13s. 4d.; old materials, &c., 161. 10s. 10d.; interest, 351. 18s. 5d.; less than sufficient to meet sundry outstanding accounts, including April cost (2041.), solicitors' charges (221.), tribute, &c., The Chairman regretted that working the mine had not proved so satisfactory as they had been led to expect by the delusive reports of their captain. Through the active direct supervision of the management, the undertaking had been saved from being swamped by heavy and increasing cost-sheets; and although a call of 2s. 6d. per share was now required, their future prospects were very promising. There are now working six men in 40 end west; six, west of winze, worth 24s. per fathom; four, east of winze, worth 14s. per fm.; two end west, in 40 south of Poldimers, two stopping, back of 40, worth 77. per fm.; and four stopping back of 30, in old men's level, worth 14s. per fm.; from these it is estimated that 19 tons of ore will be raised during May. The staff on surface consists of four men, seven boys, and two women. The monthly estimates of ore raised from Sept. 1, 1856, to Feb. 1, 1857, amounted to 50 tons, and from Feb. 1 to April 30, 55 tons, forming a total of 105 tons, of which the shipments have been 40 tons in Jan., 26 in March, and 27 in April, leaving 12 tons lying dressed on surface April 30. The balance of proceeds of these shipments, about 7001., will be sent down in cash in June and August. The call of 2s. 6d. will, it is expected, enable this company to sink the new shaft in western hill, and at the same time to work more vigorously the lodes west in the levels from engine-shaft, particularly those of the 40, where so much rich copper is already being produced, and which appear to fairly warrant the anticipation of good results. Messrs. Vallance, Gough, Thomas, Nation, Roberts, Lafone, Hayman, and Richard Barker, were appointed the committee of management, and Messrs. Langton and Smith, the auditors.

Boiling Well Mine sold for April and May—Copper ore, 16222. 7s. 5d.; lead, 2871. 18s. 11d.; blende, 991. = 20091. 6s. 4d. This return is against a cost of 13001., giving a profit of 7001. to the adventurers. This company has just had a grant for 21 years of Wheal Trevi st, giving 270 fms. on the run of the lodes at the east end of the scut, and as the ends are driven east they improve. The most eastern end is within 80 fms. of Wheal Trevi scut; this is an important addition to this property.

At Willow Bank Mine, the 17 west is looking very promising, with both white and blue lead ore in it. A very large lode has been opened on to the north-east of the one now being worked.

Nether Heath Mine has recently very much improved: having passed through some heavy work, the vein is opening out, and bids fair to richer than ever. They have besides some important trials coming on.

Mr. W. Darke is a candidate, in the place of the late Mr. Thomas Darke, for the partnership of Wheat Margaret, and other mines in the district.

Mr. Alfred Jeffree has been appointed secretary to Wheal Tallack.

At the Imperial Brazilian Mining Association meeting, on Tuesday (Capt. Vernon in the chair), it was agreed to adjourn the proceedings to Friday, the 17th of July, by which time it was expected some definite information would be received from Mr. Joel Hitchins, who had been sent out to the mines. A vote of thanks to the Chairman, directors, and committee, terminated the proceedings.

At Rio Grande Mining Company meeting (Jamaica), on April 14, Mr. E. W. Hitchins, the purser, reported that since the last meeting the mine captain had sent down 20 barrels of ore, which were immediately shipped for Liverpool. Captain Arthur had obtained three months' leave of absence to visit England, and the committee were in communication with Messrs. Phillips and Darlington, of London, on the subject of copper mining in Jamaica. As there was a probability of Mr. Phillips shortly visiting Jamaica, they hoped to have the advantage of a personal communication with that gentleman.

THE MINING JOURNAL.

At Wheal Jamaica Copper Mining Company meeting (Jamaica), April 23, Mr. G. B. Nethersole reported that the stopes in the back of No. 1 were looking well, yielding from 10 to 15 cwt. of ore per fm. The lode in the 50 south was about 5 feet wide, very regular, and composed chiefly of gossan, decomposed porphyry, and prian, and stained throughout with the blue and green carbonates of copper—on the whole, highly congenial for the production of copper ore. In the dressing department, they had sent away 18 tons of copper ore, and had 4 tons more dressed to be carried away. The shipments of ore completed was equal to 56 tons. Mr. John West, the purser, reported that the whole of the ore had been shipped at a freight of 40s.

At the Waller Gold Mining Company meeting, on Monday (Captain Torrens in the chair), the accounts showed—Balance at bankers, 141. 5s. 6d. Mr. Heneage submitted a proposition for raising 50001. by the issue of debentures of 10s. each, bearing 10% per cent. interest, and redeemable in three years at 25% per cent. premium. The proceedings, which are fully detailed in another column, were adjourned for a week.

The Alton Mining Association have their mining report from April 18 to May 2, which shows that all the operations are proceeding as usual. The following is the estimated produce for March:

| Quality. | Quintals. | Per cent. | Value. |
|------------------------|-------------|-----------|-------------|
| Dark ore—best | 450 | 27 | £1532 |
| Green ore—best | 200 | 22 | 525 |
| Green ore—second class | 800 | 16 | 1150 |
| Green ore—from Burrows | 600 | 12 | 1194 |
| Dark ore—third class | 800 | 12 | 1194 |
| Total | 2850 | | 4401 |

The Linares Mining Company have advices to May 4:—In the 75 east of Barrincons winze, the lode is worth 2 tons per fathom; in the 75 west, 2½ tons. At Warne's engine-shaft, sinking under the 30, the lode is worth 3½ tons of lead per fm. East of engine-shaft, on south lode, in the 85 east the lode is worth 2 tons per fm.; in the stopes west from the 30, the lode is worth 3 tons per fm. They had repaired the damages in the steam-whim, and had been working satisfactorily since that date.

The Fortuna Mining Company have advices to May 2:—At Canada Inca, west of Taylor's engine-shaft, in El Clavel winze, the lode in the bottom is worth 5 tons of lead ore per fm. In the sixth level west, the lode is worth 2½ tons; and east, 3 tons of lead ore per fm.

The New Grand Duchy of Baden Mines (Munsterthal) have their report from Capt. S. Richards, to May 18:—On Schindler lode, the adit level north is now cleared about 145 fms. from the old shaft. The rise in back of the adit, against the old shaft, is without any important change since last report. At the shaft, below the shallow level the ground has continued to improve, and may now be considered good for sinking in. In the stopes cutting down from surface the ground is moderate, and we are still getting on well there. The old shaft is drained and clear 19½ fms. below adit, and we have got down to sand and slime, with a quantity of old timber, crossed in various directions. At this place the lode is standing in the north end of the shaft, where it is 5½ ft. wide, composed chiefly of quartz and fluor-spar, with some muriac, barytes, and spots of lead intermixed. At the Feuergrund Mine there is nothing of importance to report since my last.

The Wildberg Mining Company have advices from Capt. Z. Walls, to May 15:—The sinking of Michael's shaft is proceeding well, and the lode in the bottom is worth 4 tons of ore per fm. The lode in the end, driving east from the bottom of No. 1 sink, is worth 2 tons of silver-lead ore per fm., and the stopes west from the same 1½ ton per fm. Driving east from No. 2 sink, the lode is worth 2 tons per fm., and the stopes in back of same 3½ tons. The Gotteschule lode is worth 2½ tons of ore per fm. The sinking in the Ehr Kammer is resumed, and the lode is worth full 10 tons of silver-lead ore per fm.

The Copiapo Mining Company have received advices to the commencement of April. The produce of ore for the month of March was estimated at 2850 quintals, of the average of 20 per cent. of copper, of the value of £4500. Checo Mine is greatly improved; in the 30, driving east on north lode, the vein will produce 5 tons of 20 per cent. ore to the fathom. In the middle lode the value of the ore may be estimated at 15 per cent. In the stopes in the back ores are being produced of the value of 25 per cent. Sinking below the 70, east of Harman's shaft, the lode is 2½ wide, and rendering an average produce. The north lode, in the 30, is greatly improved since the last account received, and as this lode has not been worked east of the present new discovery, and there being abundance of new ground on the course of the lode, should it continue to improve there is every expectation that Checo will again be worthy of her former celebrity. The Republican Silver Mine is again looking promising for a new alacana. Al Fin Hallada remains without any alteration worthy of notice. So soon as there are adequate facilities of transport for the carriage of ores, and the erection of competent redressing establishments is undertaken, the mineral industry of Chili will receive a very great and healthy impetus.

The Strathalbyn Mining Company (late South Australian Copper Mining Company) received on May 16, ex *Bristol*, 130 tons silver-lead ore, in 2358 bags.

The Fort Bowen new company (limited) have convened a meeting for June 4. A vacancy occurs in the direction by the resignation of Mr. J. Clay, M.P.

The Chancellorsville Mining Company continue to receive information of a most satisfactory character as to the progress at the works at Frodsham.

An influential company of mining adventurers in London and Liverpool are about to work the auriferous deposits in the island of Virgin del Gorda, which is about 12 hours' sail from St. Thomas, and, therefore, in easy communication with the West India Mail Packets.

The Government mines of Kongberg, in Norway, produced in April 21,271 marks 7 tons of fine silver.

In Foreign Mines, the only feature worthy of remark is in the St. John del Rey shares, which fell yesterday to 13½ to 15½, at which price business was transacted, being 9½ lower than in April last. Linares closed at 7½ to 8; United Mexican 3½ to 4. The market has been very quiet throughout the week, and the quotations will be found in the usual column.

At the Oriental Bank meeting, to be held on Monday, the accounts will show—Net profit for 1856, out of which a dividend of 10 per cent. per annum for the first half-year has already been paid, 163,362. It is proposed by the directors to declare a like dividend, and a 2 per cent. bonus for the half-year ending December 31, making 7 per cent. for that half-year. There will then remain to be carried forward 80621. 2s. 6d. The insurance fund has increased during the year from 10,960. to 38,062. The result of the year's operations is considered highly gratifying.

THE PROGRESS OF MINING IN 1856.
BEING THE THIRTEENTH ANNUAL REVIEW.
By J. T. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Glossaries among Mines and Miners*, &c.

The THIRTEENTH ANNUAL REVIEW OF MINING Processes appeared in a SUPPLEMENTAL SHEET to the MINING JOURNAL of Jan. 3, 1857.

A FEW COPIES of the REVIEW OF 1855, containing Statistics of the Metal Trade, the Dividends and Per centage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also, a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL's Mining Offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CURRIE.

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INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 31st March, 1857, with Particulars of the Position and Prospects of the principal Dividend and Progressive Mines, Tables of the Dividends paid in the past Quarter, and in the Years 1855 and 1856, and a MAP of the ALFRED and ROSE-WARNE MINING DISTRICTS, &c., is now READY, price 1s.; at Mr. MURCHISON'S office, 117, Bishopsgate-street Within, London.

Reliable information and advice will at any time be given on application.

Also, COPIES of "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

CORNISH AND DEVON MINING ENTERPRISE, By R. TARDINICK, Mining Sharebroker, Gresham House, Old Broad-street, London.

Facts and Statistics recorded, Synopsis of Dividend Mines, Plan of the Basset and Baschet District, a Clear and Succinct Description of the chief Mines. All interested in such investments should possess a copy. Price 3s. bound.

MAP OF ST. JUST MINING DISTRICT.—This MAP is now READY FOR DELIVERY. Price, mounted, 2s.; delivered in London, carriage free, to any address.—Please send early orders to the publisher, R. SYKES, surveyor, Truro.

S. IVES, LELANT, AND TOWEDNACK MINING DISTRICT.—Mr. T. DEWEKE begs to inform his friends and the public generally that his MAP of the above DISTRICT, and a STATISTICAL ACCOUNT thereof for the past 30 years, is now READY, and will immediately be sent to any party who may require a copy, on the receipt of 14 postage stamps.

Dated Uny Lelant, Hayle, April 9, 1857.

Notices to Correspondents.

Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

MINERAL OIL.—Crude oil from coal has been successfully manufactured in London, under a patent dated 1850, but the untimely death of the patentee, and the complication of his affairs, has, for the present, caused its continued manufacture to remain in abeyance; a mode of purifying was also perfected, which, from the same cause, is now dormant, although the machinery, erected at a cost of nearly 3000*l.* for this important object, is nearly intact, and could at a small cost again be put in operation. The subject is one of such magnitude, and your correspondent is otherwise so fully engaged, that he cannot follow it, but would be happy to afford any information in his possession to parties interested therein.—T. L. : Lambeth.

VENTILATION OF COAL MINES.—The introduction of good air doors would, no doubt, be of great importance in the ventilation of collieries, and I think that the invention of Mr. R. Boycott, of Blaize, appears one of the most practical that has yet appeared, as all pulleys and similar contrivances are dispensed with, and yet there appears equal certainty of the door closing itself, and no increase in the force required in opening it when requisite. It appears, however, that he only provisionally specified, and I, therefore, wish you to inform me whether the idea was not new, or what was the reason the patent was not obtained.—M. : Newcastle, May 18.

IRON SHIP-BUILDING.—There are various suggestions from time to time on the subject, which have been forwarded to the Admiralty, as well as to ironmasters and shipowners. The Government is proverbially slow in its movements. A few nights since, Lord Clarence Paget gave it as his opinion that sailing vessels were better than steamers. Many of the naval officers of the present day are very deficient in steam seamanship, and therefore willing to discourage the diffusion of any improvement of which they are practically ignorant. Notwithstanding an examination has to be passed previous to a person becoming an officer in the royal navy, as much nepotism and patronage exists there as in other public departments.

QUEEN OF DART MINE.—All the reports received from this mine have appeared in the Journal.

WHEEL GRENVILLE.—In noticing the meeting of this company last week, it was stated that "Capt. Odgers reported upon the various operations in the mine;" and added that "to work this mine effectively would require an engine, say from 50 to 60*h.p.* cylinder." This should have been "to work Poligne effectively, &c.," which is a mine in the Grenville sett, but distinct from the two other mines—Grenville and Neuville—now worked by the company. From Poligne large quantities of ore were sold during the last working.

COLLIERY EXPLOSIONS AND SAFETY LAMPS.—"M. P." (Bolton) observes, that Mr. Cookney has totally misunderstood the purport of his communication inserted in our Journal of May 2. His present one is merely a running comment upon the remarks elicited from Mr. Cookney. He states, that the ventilation of collieries is very simple, and that this can be done so effectually that the safety lamp will no longer be necessary. No plan how this is to be effected has been forwarded to us; much that is theoretically right is often found to be practically wrong; every inventor imagines that his plan, if not the *plus ultra* of perfection, is a decided improvement on whatever has been put before the public previously. There are many who assume that length of years gives not only experience, but at the same time talent; and imagine that with increased age a corresponding amount of wisdom must follow. Several plans have been proposed for the proper ventilation of collieries; and there are many who are ready with all sorts of propositions so soon as any calamity attaches an interest to any design for the prevention of accident. Many of those that we have seen have been crude, impracticable, and, in many cases, the mere concoction of ignorance and vanity combined, the propounders of them, in too many instances, attaching an importance to ideas which, judging from the value they themselves put on them, are invaluable, but which weighed by others are entirely worthless. If "M. P." could devise some plan for a complete ventilation of collieries so as to prevent accidents, he would be one of the greatest benefactors of the human race. In the meantime we must remind him, that no assertion can be considered as trustworthy until practically tried, and its worth tested.

PERPETUAL MOTION.—I observe that a proposition has been made to obtain motive power by the oscillation of a horizontal tube, arranged with a series of arms and valves; and although the person proposing it may have been more successful than myself, I fear he will find great difficulty in putting the scheme into practice. The valves act properly enough for a short time, no doubt, provided the tube be well balanced, and a good momentum be given at starting, but I could not easily compensate friction, &c., and, therefore, abandoned the idea, and am not now so thoroughly convinced that perpetual motion can be produced.—D. J. : May 17.

RAILWAYS IN THE ALPS.—M. Grassi having proposed the application of the Archimedean screw to locomotives, for taking them up inclined planes, and Capt. Moorsom having given a favourable report upon the practical utility of the invention, perhaps I may be allowed to ask a question or two, which it is of the utmost importance should be answered, previously to the adoption of the system in opposition to the proposals of the engineers who have given their opinion as to the Alpine railway. Would there be any difficulty in giving sufficient strength to the teeth of the bevel wheel, to compensate for the immense amount of wear which it would be required to undergo? And would there be any difficulty in overcoming the friction to which the screw itself could be subjected? If both these difficulties are easily surmountable, the new system could be adopted—at least, until the tunnel shall have been completed; but as the cost of every engine would be considerably higher than that of an ordinary locomotive, it would not do for permanent use. In the calculations given by the inventors, the statement is made by comparing one ordinary locomotive with one screw locomotive; but as on long lines one ordinary engine would be of little service, I suppose one screw would not be more useful. Then, as every addition to the number tells against the screw-engine, I have little doubt that, by the time the requisite amount of power has been obtained, the cost of the two systems would be found about equal; whilst the old method would be of greater utility, both from avoiding steep gradients, and from avoiding the altitude which would be reached under the new system.—J. B. : Paris, May 20.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—From the announcement in the last Journal, I perceive it is the intention of the directors shortly to call a public meeting, that Mr. Frankland will be present, and Sir Henry Huntley invited to attend. I trust we shall have the satisfaction of meeting both these gentlemen: if we attain no other result, we shall be able to discover how two superintendents (one of whom received his education in the royal navy, and the other in the mercantile marine) became qualified to act as such. Apparently, both have, since they have resided in California, been "at sea," and the only geological knowledge they appear to have displayed is their discovery of the rock upon which they have stranded the property of the shareholders. Their mineralogical requirements I will not speak about, but when they became acquainted with the directors and proprietaries of this company, they knew perfectly well how to work the "greens," and although they have stamped but little themselves, we must certainly be acknowledged to have turned out pretty fair "halvans." We have been jugged and bundled until there is nothing left of us but the "skimpings," and then they would again dress. One mining gentleman, I regret, cannot be present—Mr. James Duggan, of Kerry, who, from being a working miner in the employment of the *Aqua Fria* Company, now holds the Anglo-Californian property. How did this arise? Procrastination is the thief of time, and delays, we are told, are dangerous. In their circular, the directors stated that, if they were not put in possession of funds by May 9, the affairs of the company would be hopeless. I would ask, is this the case? We know the worst: why, then, do not the directors at once call a public meeting, and put the proprietary in possession of such facts as they have in their power? Is a regard to Sir Henry Huntley, knight though he be, to prevent them from doing their duty to the shareholders? He has professed his willingness, through the medium of your Journal, to explain his management to the shareholders. Let them give him the opportunity: he is to be found in the vicinity of Hampton Court Palace, and a letter, therefore, will always reach him. The foods and the state of the roads have often prevented him from leaving his hotel in San Francisco to proceed to the mines, and the boats from Hampton to London occasionally ground at Kingston and Putney, and thereby delays might occur: the South-Western Railway, however, is in good working order, and I think, if necessary, after so much money has been expended on Sir Henry Huntley's journeys, that the shareholders would not object to the outlay of a special train from Hampton to Waterloo, provided they were assured that they could have the opportunity and pleasure of seeing and hearing their late gallant and esteemed superintendent.—MILES XI NAVIS: Full Molt, May 21.

LORDS' DUES.—The announcement of the liberal lords, in your last Journal, gives good grounds for hope that the articles you have at various times inserted on this subject have not been without their due effect. The Welsh landowners have taken the hint, and ground that was only to be had at 1*l*-7*sh* can now be had at 1*l*-1*sh*. The impetus given to this "step in the right direction" will not be retarded, and greatly encouraged, by such articles as yours of last week; and I beg to say that a sum which I applied for some time since at 1*l*-8*sh*, will now be granted at 1*l*-1*sh*. Depend on it, Sir, perseverance will do much, but example will do more. The Cornish lords have indeed set a good example, and it will assuredly be followed. You and they deserve, and have, the just thanks of all true miners, whether under or above ground, as well as those of—CAPTAIN: May 21.

TRIWAINE UNITED.—Observing a notice of the discovery at this mine, in the Journal of last week, I think it necessary to inform the writer and your readers that the mines in question do not adjoin the Crewe and Abraham, nor are they in the parish of Gwinear, but situated in St. Key, adjoining the Old Trebreg, which yield a profit of 20,000*l.* or 30,000*l.* to the proprietors, under the management of Capt. Enn's. It is to be regretted that "Picks and Gads" should venture a statement which seriously affects the force of his communication, which in other respects is perfectly true.—W. H. GRAY: St. Austell, May 19.

VARIATIONS OF THE MAGNETIC NEEDLE.—"J. R." (Worsley, near Manchester).—In answer to our correspondent's question as to what was the variation of the magnetic needle in the year 1856—also, as far as observations have been made—what the variation for 1857—we have ascertained the following particulars:—In 1856, the mean was about 21° 43' west; in 1857, to the present time, the mean is about 21° 40'; and the mean for the year probably will be 21° 38'.

MINING MANAGEMENT.—"Justitia" (Llanelli) complains that, now mining enterprise is receiving the attention its merits demand, and shows all the elements of future success, yet, owing to the conduct of many of those connected with it, it is being brought into disrepute. He particularly alludes to the case of the Great Cambrian Mining and Quarrying Company, which is now levying its second Chancery call upon the unfortunate shareholders. This concern, he states, was brought out under most delusive aspects: promises were made which were never fulfilled, and the shareholders in this unfortunate concern have been, according to all accounts, most cruelly disappointed in their expectations. The conduct of the brokers in many cases is highly reprehensible, and affirms that, in several instances, their only endeavour is to entrap individuals to embark in worthless schemes. There is no doubt that there are many evils which might be remedied. The public themselves should be more careful of their interests. No further comments are here necessary, as in some leading remarks in another column we have drawn attention to the ill that now exist, and pointed out how they might in some measure be obviated.

MANGANESE TRADE.—We should feel obliged by being informed of any firm in London or Rotterdam willing to supply manganese at the current quotations.—S. AND J.

"F. L. M." (Birmingham).—The large cobalt works at Modun, in Norway, have been several times offered for sale. At no great distance from them is a nickel mine, which is now returning a small profit. The nickel works at Espedal, which were taken up by Messrs. Evans and Askin, in 1847, are now abandoned.

ANGLO-AUSTRALIAN GOLD MINING COMPANY.—About six weeks since, you stated, on the authority of the secretary, that an engine had been dispatched to the works. I do not anticipate yet that we could have heard of its arrival. Still, I think that, as advises since that period have come to hand from Mr. Falder, the resident director, in common courtesy to the shareholders, who have exercised such exemplary patience, some information might be afforded us as to what is the name of the location we possess—whether it is rich in auriferous quartz, and what surface operations have been performed. It is now over three years since Capt. Bell left England, and, with the exception of two meagre reports in your Journal, we have not received any accounts, although by the terms of the deed of settlement we were to have had an annual meeting.—NAME: Gravesend, May 20.

SOUTH AUSTRALIAN MINING ASSOCIATION.—"A Constant Reader" (Aberdeen).—The ore are announced in our Journal of last week as having arrived ex *Nere*, was from the Barra Barra Mines, the company being called the South Australian Mining Association. An arrival is announced in another column from the Strathalbyn Company (Limited), late the South Australian Copper Mining Company. The ore received was 130 tons, in 2358 bags.

WEST CAIRNIS MINING COMPANY.—I have occasionally seen meetings of this association reported in your Journal, but among your list of British Mines I do not remember ever having seen the weekly reports of the agent, who, I believe, is Mr. John Webb, of St. Austell. I was told at the commencement of the present year that they were about to purchase *Wheat* Regent, and work them conjointly, from which great results were anticipated. The offices, I have heard, are in Birmingham; but no accounts of the mine having been published for some period, I presume it must be defunct. The property, I believe, is considered to be one which, if carried deep enough, would be likely to afford remunerative results. Probably, through the medium of your Journal, some of your correspondents may inform me whether this mine is still worked, or "knocked."—ARMAR OF CALL: May 22.

SOUTH TAMAR MINE.—"A Shareholder" (Exeter).—The difficulty in winding-up this company arises from a claim for compensation.

OLD TANWETHER COWS.—In answer to the question of our correspondent of last week, we are informed that the mines are in a promising condition, and likely to prove profitable to the adventurers. Within a short period upwards of 20 tons of actuary ore, of a superior quality (from *Wheat* Regent) have been raised, and now ready for market; and it is expected, from the present appearance of the various holes throughout the mine, a further and larger supply will be immediately obtainable.

LUND HILL COLLIERY.—You have no doubt observed that the Board of Guardians at Barnsley intend, if they have not already done so, to refuse relief to the widows and orphans of the unfortunate men who perished by the dreadful explosion at this colliery. The plea these Pharisees put forward is, that the unfortunate individuals have received aid from the benevolent persons who so promptly came forward at the period of the harrowing catastrophe. I would enquire, what law or justice do these Yorkshire Dogberrys act upon? I am glad to see that many who have subscribed express their intention of withdrawing their names, and at the same time their money, if this singular and unjust resolution is carried into effect. If this is allowed, boards of guardians will have it in their power, whenever a calamity occurs, to refuse relief, because the recipients have had their first wants promptly supplied by private benevolence, instead of waiting until it is doled out to them by the absolute wisdom of callous official insolence. I repeat, this is a dangerous precedent, and I trust that the committee will see that these poor sufferers are not defrauded of their rights. Is the Barnsley Board of Guardians to contravene the orders of the Poor Law Board, to shirk private benevolence, and to play all manner of fantastic tricks, in order to relieve their rates? I trust not. This is a question which affects every working collier and colliery proprietor in the United Kingdom; and I trust they will combine to bring these irresponsible officials to a proper sense of what is their duty. These bodies in general are not supposed to be possessed of any great amount of intelligence, but, judging from their acts, this appears to possess far below the common average of that ingredient, although I must say that they appear to have a good stock of those qualities which have rendered Yorkshires so famous in the works of our older and more modern novelists. With a vengeance, they appear to be in truth "Yorkshire bites."—CARRON: May 22.

STEAM BOATS FOR SHALLOW RIVERS.—Some time since, you referred to the construction of seaworthy boats drawing only a metre (nearly 40 inches of water), for carrying coal to Paris, but I have never heard that the proposition was carried out practically. However, if seaworthy vessels could be made to draw 40 inches of water, I see no reason why small river boats should not be constructed, drawing 10 inches of water only. Could this be done, many of our rivers could be rendered available for passenger traffic, which are now wholly useless for that purpose. I should be glad if you could inform me the lightest draft which has yet been employed successfully, both for river and ocean navigation.—C. J. : Exeter, May 22.

CARRERA-NOVA MINING COMPANY.—A short time since, I was informed that this mine was about to sell ore, but have not yet seen any account of the sale. The ore, it is understood, may probably have been sold at Amiagh, instead of at Liverpool, as formerly used to be the case. There is, I believe, a small works at Runnen, where they purchase ore from ore, and there are no tickings, so that, probably, it has escaped your notice, should they have been sold there. No reports have been published for a considerable period, and I think that the new management should afford some information to the company, as many of the old shareholders would then probably bear their just proportion of the liabilities incurred by the two promoters.—SAXON: Birch Lane, May 21.

TRONVON MINE.—In your valuable Journal of last Saturday, I perceive a report of the above mine, signed W. Tom, and dated May 11. There are many statements in that report which startle me, but one in particular is of such an astounding nature as to induce me to believe that if Mr. Tom saw the lode in the sink under the 25, which he describes as having increased in size from 10 in. to 3 ft. wide, he certainly does not know copper ore from spar, or the lode must have changed tremendously in two days, for I myself was in the same sink, winze, stop, or what Mr. Tom may be pleased to call it, on May 13, and although the lode may have run 2 feet wide, the difference in Mr. Tom's value of the lode, on May 11, and mine, on May 13, is just that between 25*l* and 30*l* per fm, and nothing, for when I saw it on May 13 it was of little or no value, now does it seem to have been for a very considerable time, if ever, below the 25 fathom level. Mr. Tom states, also, that on May 11 the lode was 10 ft. wide, and that day so filled with stuff as to preclude the possibility of seeing the lode under the floor of the 25. One thing I know, that in the end of the winze alluded to the lode is not worth anything. I am truly sorry that the reports from this mine have not been of a more moderate character, as many portions of them cannot be borne out by facts. I trust, Mr. Editor, to your desire at all times to promote the cause of fair and legitimate mining, to find a corner in your Journal for this, as a caution to the public.—R. WILLIAMS: May 20.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, MAY 23, 1857.

From the immense preponderance of evidence against the advisability of Rating Mines, given before the select committee appointed by the late House of Commons, we had hoped that it would not again, at least for a considerable period, have been our duty to return to the subject. We regret that our hopes have not been realised, and more especially as it is again the Member for a mining district who has proposed the re-appointment of the committee. It is true that in the present instance the opinions of some of the witnesses upon the former occasion appear to have been taken into consideration, since it is now proposed to lay the impost upon the royalties instead of on the mines direct; but we contend that numerous arguments have been, and can be, adduced to prove that there is no justice whatever in the attempt to further rate metalliferous mines, whether directly or indirectly. However, the new committee are now chosen, and consist of Mr. KENDALL, Mr. MICHAEL WILLIAMS, Mr. G.

CAVENDISH, Mr. CHILD, Mr. BOUVELIE, Mr. PHILLIPS, Colonel PENNANT, Mr. RIDLEY, Mr. SPOONER, Mr. HUSK VIVIAN, Mr. HUME, Mr. HENRY HERBERT, Mr. COLVILLE, Mr. WILLIAM ORME FOSTER, Mr. DAVENY, and Mr. DUDLEY FORTESCUE. It is, therefore, the bounden duty of all having the interest of mining at heart to use their most strenuous exertions to prevent any bill for rating mines, in any form, from becoming law.

It has been argued by the promoters that the effect of the measure will not be felt by the mining community, and when we consider that this line of argument was adopted in support of the Rating of Mines Bill, 1856, in which the taxation was to be direct, and yet had a powerful influence upon the minds of many, how much more weight will be attached to this statement when it is simply proposed to rate royalties. It must, however, be borne in mind that the question should not be viewed in this light at all, but that it should be regarded as an indirect tax upon mining enterprise generally; and although the mining community might not individually feel any direct pressure from the imposition, it is certain that the passing of such a measure would have the effect of causing the abandonment of many promising progressive and speculative mines. It is said by those in favour of the bill that the lord incurs a risk by allowing his property to be mutilated, without any other remuneration than the prospect of a proportion of such profits as may be realised; but we shall hereafter endeavour to prove that this is NOT the fact, since two frequently the adventurers do not realise the smallest amount of dividend until years after the lord has commenced receiving returns.

It is being the invariable custom to pay lords' dues upon every parcel of ore sold, without consideration as to whether such ore has been raised at a loss or at a profit, it is evident that the taxation of dues would press much more heavily upon mining than the taxation of profits; for, as it would be impossible to compel the lords to take a fixed maximum royalty, the rate would commence from the

guard themselves against their own cupidity and delusive ideas. If this advice be followed out in the integrity with which it is offered, we shall then not have to record the disasters of so many unthinking dupes, or the fortune of a few successful rogues.

Among the harpies who in general prey upon the vitals of all public companies are those individuals who style themselves "promoters," and who, out of preliminary expenses, endeavour, and in some instances successfully to appropriate to themselves the lion's share, though what duties they have performed it is difficult to arrive at. The shareholders of the Unity and the Western Bank must have been surprised at the preliminary expenses in both these undertakings. Among the promoters of the latter we recognise two of our mining friends, both of whom have been connected with defunct companies, the one the Dalecarlian, and the other the Asturian. The former had but a brief career, while the latter carried on a long lingering existence, and the promoter there managed to become a liquidator, than a trustee, and in all the phases of its existence had always a finger in the pie. Many of this class are totally ignorant of mining, nor do they care for it as an enterprise in any way, their only object being to traffic in the shares, to obtain a good price for their scrip, care less whether the adventure be carried on or not. There is something to be made for promoting, a little may be made at the winding-up, or the resuscitation, as the case may be—in fact, "company making" has become a trade, and there are many individuals who abandon or neglect respectable professions to follow this questionable calling.

Wherever these species of commercial traders are concerned, an investigation into the soundness of the speculation is necessary. Sometimes they have good properties in hand, the value of which cannot be doubted. This is, however, of secondary importance to them. They erect machinery where it is not necessary; incur needless expenses; obtain men to write delusive reports,—for, we regret to say, such has been the case,—they spread most flattering and encouraging intelligence, recommending the undertaking as a sound investment to the public, which there is no doubt it would have been, in many cases, if properly managed. Their shares are, however, carried up to a premium; the majority are sold; a few are kept for the sake of appearances; the shareholders are called together; the agent, a willing tool, is not present; the report of the directors is read, and the unfortunate proprietary are told that the committee were not miners, and it was a great error of judgment on their part in allowing themselves to be guided by the agent, and thus the comedists ends.

It is useless here to mention the number of mines where this farce has been gone through; in too many at this present time the system is being carried out. The Attorney-General's bill will, no doubt, make committees of management more careful for the future of the moneys entrusted to their charge; but nothing will more conduce to a healthy spirit of commercial enterprise, than constant caution on the part of the shareholders. With regard to mining especially, it is a source of regret to find that occasionally among those recognized as respectable men, and who direct the market in London, a spirit of fair dealing is not exercised towards their clients. Shares have been sold, and the money obtained for them, previous to their having been purchased; and when these could not be delivered, excuses and subterfuges of all grades have been resorted to. This has occurred not only in one instance, but in several, and is now a matter of public comment. It becomes incumbent not only on those who are concerned in mining, but likewise all well-wishers to mineral enterprise, to put an end to these great scandals, and endeavour to sweep away these crying evils.

The examination of a railway and mining share dealer in the Bankruptcy Court, this week, has caused some excitement, and no little indignation, among respectable brokers in the market; especially as from no complainant having ever been made against the party in question, no suspicion was entertained that he had been guilty of the conduct proved against him—that of having received money for shares which he had never delivered, *nor even purchased*. That such a practice exists on the Stock Exchange, or among respectable brokers, or dealers, in the mining market, as stated by his solicitor, is, we have reason to believe, a gross calumny. That a system of "bearing" and "bullying" stock, or shares, for the account or settling day, exists among dealers is well known; but, on account days, settlements are arranged, shares delivered, and differences paid or received, as the case may be. The duty of a broker, however, is to execute the orders sent to him on the day he receives them, to deliver the transfers within a reasonable time, and then receive payment; for it has never been a practice with respectable brokers on the mining market, except in special cases, to ask for payment beforehand, and we must say, that it appears to us more caution should have been exercised in remitting money in the cases referred to, previous to the delivery of the stock.

The great movement of the country is towards mining. In every part of the empire great activity prevails in this respect, and powerful combinations of moneyed men are forming for the development of many known districts of mineral wealth. We have long foreseen that the current was rapidly coming to the flow, and although monetary matters retarded, and do retard still, to a certain extent, the operations of this nature, it was clear that a material change would speedily be produced. It was impossible for any reflecting person to come to any other conclusion, who examined the statistical returns of the exports of ores and metallic manufactures. It was impossible for the trade to increase in such a marked manner without a corresponding increase being produced in the yield of the raw material, and hence great animation has been given to existing mines, and inducements held out for the formation of new undertakings. Last year, the value of the exports of articles identified with mining was 27,000,000^l, and this year it is calculated it will reach about 35,000,000^l. This mere increase of 6,000,000^l or 8,000,000^l, is of itself evidence that activity must prevail, and that more capital must be brought to bear on the mining interests of the country.

Of the beneficial result of capital applied to home mining, when judiciously laid out and managed, we have an example in the Devonshire Great Consolidated Copper Mining Company, a report from the directors of which appeared in our last Journal. It was the thirteenth annual meeting at which the statement was laid before the shareholders, who had the satisfaction of dividing, as dividends for the year, the sum of 64,512^l, or at the rate of 63¹ per share; yet the shareholders' capital is represented by 1024^l, in the same number of shares of 1^l each. This is no mere accidental appropriation of profits to the extent named, but may be regarded as the customary benefit accruing to the proprietors; for, taking the amount paid since the commencement of the undertaking, we find that the average is upwards of 42^l per share per annum, which upon the sum originally invested is equal to 4200 per cent per annum. In addition to the amount mentioned as interest, a rest, or reserve fund of upwards of 30,000^l, continued in the hands of the company, while the estimated value of ore at surface and underground is set down at 42,824^l. Altogether the property and assets represent a total of 134,983^l; and as the capital and liabilities are given as 12,965^l, it necessarily follows that a balance of no less than 121,403^l stands to the credit of the undertaking, or equal to 118^l 10s. per share. From this general balance a further dividend of 12^l per share was declared by the directors at the meeting yesterday, and yet a cash balance of 29,683^l, still continues at their disposal.

Supposing, therefore, that the immediate winding-up of the affairs of the association was determined upon, an original holder would have received 6364^l 10s. on every 1^l invested, in addition to the return of the capital which is included in liabilities, and of this enormous benefit he has been the recipient in 13 years. Of winding-up, however, there can be little apprehension, as must be plain to all who read the report, and there is every probability of increasing profits for a long period to come. The renewal of the lease, with extended lands on the course of the lodes, justifies the expectation of even still more lucrative times for the fortunate holders of the shares; and the report of Capt. JAMES RICHARDS shows an amount of ore ground laid open and available which would be quite fabulous to persons unacquainted with the truths of mining enterprise in this country. Nearly 68,800 tons is the aggregate valuation, and so minutely is the estimate laid down, that there cannot be misapprehension in the matter. The total of ore ground in Wheal Anna Maria, a section of the property of which the Devonshire Great Consolidated Copper Mining Company consists, is given at 35,943 tons; Wheal Josiah, 21,306 tons; Wheal Emma, 5691 tons; Wheal Fanny, 4479 tons; Wheal Maria, 1112 tons; and Wheal Thomas, 200 tons. Such is a sample of an English mine as respects its position and prospects. With such undertakings at home, is it not sheer madness to embark capital in similar undertakings abroad? The day for such ruinous projects has, however, passed away we trust, and certain it is that those who do disregard the caution so constantly given meet now with no sympathy in their misfortunes. There is plenty of room in this country for active mining operations, and everything shows

that the feeling is generally opposed to all foreign schemes; while the profits resulting from home mining far exceed the benefits of any other description of British enterprise, and, consequently, present inducements for investment of no ordinary kind.

Nothing can be more certain than the effects of supply and demand; they are sure to find their level. Some weeks since we predicted increased business in the Birmingham metal manufactures, as the result of cheaper rates for copper and tin; the very high prices of these metals had seriously crippled the manufactures, it being next to impossible to raise the price of goods in proportion to the price of metal. We are now informed that great activity exists, and orders are more abundant; this is a good sign for miners, as the present rates for minerals are sufficiently high to be remunerative to all parties, and to inspire confidence on all sides. That the demand will be continuous need not be feared; the recent check to manufacture was solely brought about by the unduly high prices of metals. How they attained such rates must be best known to the dealers; however, they gave an impetus to mining that has done a vast amount of good, and will continue to do so. It is with sincere pleasure we continue to receive favourable accounts from most of our mining districts. Though copper and tin are not so high as they have been, the miner appears satisfied, and if the price suit the consumer all will be well.

Now, the Government appears to be in a settled state, the supplies of bullion increasing, and the prospects of an abundant season apparent; we think the mining interest has nothing whatever to fear, but all to hope. There, perhaps, never was a period when the prospects for the mining population were more favourable; the materials consumed in mines—hemp, tallow, timber, and the other heavy expensive articles of consumption—are (thanks to the Russian war being concluded) at a moderate price. Extensive orders are given by some of the leading mines for supplies of this sort, that had been withheld in consequence of excessive prices, thus illustrating the effect of supply and demand in the manner we commenced this article. As surely as any one object of general consumption gets unduly dear, the demand will fall off until the price reaches a legitimate level.

On a former occasion we made a few brief remarks on the probability of the exportation of grain from Australia to this country. We alluded more especially to the opening up of the fertile corn lands of the interior by the construction of railways throughout the different colonies. While Victoria has been sending forth her gold at the rate now of one million sterling per month, South Australia has been developing the richness of her surface soil by an equal comparative expansion of her agricultural produce. Victoria, however, has seen the necessity of due attention being given to this point as well as to the precious metals, and is now beginning to reap the benefit. Hitherto her chief supply has been imported from the sister colony of South Australia, Valparaiso, and Chili, and during the year 1856 the value of grain brought in was nearly two millions sterling. This amount will be much decreased during the present year from the fact that a much greater extent of land is under tillage, and it is expected that about two years Victoria will be independent of such imports. This is without respect to railways; but if their expansion be rapid it is more than probable that the colony will export grain before the expiration of the period named. Preparations, in fact, are already made for the transmission of wheat to England from South Australia in anticipation of a cessation of demand from Victoria. This is a very important state of things, and as these hitherto distant colonies are now brought into such close proximity to the mother country by the great acceleration of steam conveyance, it is impossible to foresee the effect which may be produced in our general import trade in grain. By many it is supposed that Australia will ultimately render us perfectly independent of Russia in this respect, while the quality of the wheat in South Australia and Victoria is far superior in all respects to that from Odessa. The harvest is over throughout the colonies, and the crops have been secured in excellent condition. "The question, therefore, arises," says a correspondent, "what is to be done with the produce?" hence England is looked to for taking off the surplus, more especially as it is calculated there will be a clear profit of 10s. per quarter. It will, moreover, furnish freight direct home to the large tonnage which now leaves Port Phillip in ballast for the Indian ports, Callao, and other places, in search of cargoes to Europe. It is a well-known fact that the London fleet, which is so highly appreciated in the colonies, are often obliged to remain for long periods—indeed, it is only in the wool season that a return freight can be quickly obtained.

That capitalists are now directing their attention to our Australian colonies is evidenced clearly by the rapidly increasing export trade, as shown by the returns from the Board of Trade, together with the various projects now under organisation in this country for the construction of railways, docks, and other great works, particularly in Victoria. That this colony should be the first to be brought under the consideration of English enterprise is natural from the fact of the vast treasures of gold which she possesses, and of which railways will facilitate the transmission, as well as reduce materially the cost of such transmission. Again, docks are absolutely necessary for the due and punctual carrying out of the trans-oceanic trade and commerce of the colony. This cannot be better evidenced than by reference to the fact that the *Oneida*, the safety of which there was so much doubt, was compelled to go to Sydney to make good the necessary repairs, whereas, if there had been a proper place for her reception in Port Phillip Bay, the delay in the transmission of her mails would have been trifling and the apprehension as to the safety of her passengers wholly removed. It is indeed surprising that this great defect as respects the shipping interests of Victoria has not been long removed by the construction of wet and dry docks, more especially as many eligible sites present themselves, and as the bay is, at times, both tedious and dangerous in its navigation. It seems to us wise, therefore, to establish this desideratum either at the entrance of the bay, at Port Phillip Heads, and thence by a railway, direct, orskirting the interior coast, to Geelong, a distance of 16 or 18 miles, where it will join the Geelong and Melbourne Railway, and thus connect Melbourne direct with the entrance of Port Phillip Bay, orat Williamstown, or Sandridge in Hobson's Bay, as suggested by Mr. R. W. POLLARD, in his prize essay on the internal communication of the colony by railway in connection with docks. Such is, we believe, the outline plan of the Queenscliff and Geelong Railway and Port Phillip Dock Company, an enterprise about to be introduced in London, but we necessarily wait the perusal of a detailed prospectus before we can specify its more particular merits. We merely mention the project in alluding to the various undertakings which it is considered necessary to organise in this country for the advancement of the general prosperity of our important Australian colonies, and for the protection of our shipping interests, which form an essential and powerful part of our relations with those places. Railways and docks are necessary links in the scheme for rendering our Australian colonies lucrative corn-producing districts for home supply; and, therefore, every encouragement should be given to undertakings of this nature which present feasibility on the face of the plan with prospect of beneficial advantage to those who embark their capital for such purposes. It would, apparently, be a great gain to this country to be independent of Russia in every description of supply, and with our numerous colonies and settlements in every part of the world there seems no reason why British labour and enterprise should not produce every article required.

Mr. SQUIRE repeats his offer to show his process for the economical and effectual treatment of gold ores. An advertisement to this effect appears in our columns set apart for such insertions; and this gentleman alludes specially to the auriferous matrices of the Quartz Reduction, Anglo-Californian, Liberty, Waller, and Quartz Rock Companies, which he has tested fully on a limited scale, and desires to operate more extensively that he may commercially demonstrate the extraordinary value of his treatment. On a former occasion, we expressed a hope that his principle would be determined by some of the associations largely interested in the question, and, as he volunteers his services, no damage can accrue by the scientific examination of the merits of the treatment, but, on the contrary, much benefit may be the result. So confident is Mr. SQUIRE of the success of his invention, that he regards it as a matter of the utmost magnitude, inasmuch as it will render productive many localities in this country, where gold is supposed to exist to an insignificant degree only, and will furnish vast returns of profit to Californian and Australian gold companies, which are now mere sources of outlay and loss to the shareholders. He contends, in fact, that the quartz, both from Australia and California, which under the system usually adopted yields only about half an ounce of gold per ton, will give from 50 to 100 ozs. by his treatment. This is a bold assertion, and should be tested. Perhaps it will appear fabulous to many of our readers, but what we have witnessed ourselves has been so truly astonishing that we are bound to receive the assurance of Mr. SQUIRE, on

this head, in all soberness and good faith. The companies named should take the initiative in the matter. Combined action on their part would entail but trifling expense on each, yet the operation on the aggregate quantity of quartz would be sufficient to set the question at rest, either affirmatively or otherwise. If the smaller trials be confirmed by an extensive operation of this nature, a principle will be laid down which will completely revolutionise the whole, and much-revived, question of gold production, particularly in reference to Great Britain. If what has already been done by this gentleman be a faithful earnest of the commercial application of the treatment, there can be no doubt of the issue. Let it be at once tried. This is truly the age of wonders, therefore, it is quite possible that this will prove wonder amongst the wonders; and we do trust that the offers of Mr. SQUIRE will not be allowed to pass unheeded. Apart from the mercantile bearing of the invention, it is one of great scientific interest, and in that respect should be enquired into, if in no other. Is it not a matter the School of Economic Geology should take in hand?

The hope which we expressed in concluding our last notice of the WEST OF IRELAND MINING COMPANY, that we might have shortly the pleasure of announcing that operations had been actually commenced, seems likely to be more speedily realised than even the most sanguine well-wisher of the company could have reasonably anticipated. Important accessions of gentlemen of standing and influence continue to be received from day to day, embracing the names not only of patriotic Irishmen, but of gentlemen interested by connection, and the possession of property, in the development of the resources of Ireland.

The general feeling exhibited towards the company has warranted the directors in dispatching Mr. J. H. CLEMENT, the superintendent of works, to the district, to make the necessary preliminary investigations into the actual state of the Sheffry Silver-Lead Mine, in which operations will, in the first instance, be commenced; and to report upon the machinery, &c., requisite to open the works forthwith. Mr. CLEMENT's varied, extensive, and lengthened experience admirably qualify him for the position he has been selected to occupy, and we expect to be enabled next week to lay before those interested in the important enterprise in which he is associated the result of this inspection of the mine mentioned, and the adjoining neighbourhood.

Mr. CLEMENT's attention will also be directed to the marble quarries, and to the slate quarries at Derry-Herbert and Lanmire; and it will be interesting to have a confirmation from him, of the highly favourable opinions already given and published, not only of the works already partially opened, but of the general indications of the locality.

No more opportune season could have been possibly selected, even had it been matter of choice, for the commencement of works in this district. We find grievous complaints still proceeding from the West of Ireland of want of employment; and this at a season of the year when lengthening days and fine weather are peculiarly favourable for outdoor labour. The West of Ireland Mining Company may be destined to be of as much importance, socially throughout the country, as it may result in profit and advantage to the individuals who compose it.

THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL.

FROM OUR CORRESPONDENT IN WEST CORNWALL.]

MAY 21.—The standard last week was again well sustained, and each week's sale since the reduction in the price of fine copper has tended to the conclusion that the smelters will keep up the price to 126^l. per ton. At the corresponding sale of last year ore copper sold at 95^l. 14s. per ton; last week the price given was 104^l. 12s. per ton. On June 25, last year, the price of cake copper dropped from 126^l. to 107^l. 10s. per ton. That no such a fall is contemplated now is pretty evident, from the smelters giving the miners so much more for ore copper than they did in May last year. The price now given for ore copper is but slightly different from the prices in the corresponding weeks of 1854 and 1855, and in these years the price of fine copper was maintained at 126^l. per ton. We may, therefore, hope and expect that the same price will be adhered to during the ensuing summer. The advantageous position of the copper miner, as compared with his circumstances last year, may be judged of by the following comparison of ores sold:—

| Tons. | Standard. | Produce. | Price per ton. |
|--------------------|------------|-------------|----------------|
| May 8, 1856 | 4791 | 135 4 | 7 36 14 |
| May 14, 1857 | 4765 | 145 6 | 6 1/2 |

After making allowance for the difference in produce, it appears that the miners received last week 12s. per ton more than they did at the corresponding sale of last year; and that difference upon the ores sold last week (4765 tons) shows 2859^l. to the advantage of the miners more than they would have received for the same ores, if sold twelve months ago. Scarcely anything more is needed to show that copper mining must be now in a healthy condition, having a good price for ores to ensure its prosperity—not so high a price as in the first month of the present year, when it rose to a figure beyond precedent, but still a remunerative price, satisfactory to the miners, and also, we believe, to the manufacturers, who would rather that there should be a reasonable price maintained without fluctuations than that there should be such sudden changes of prices as occurred last year, to the serious detriment of business. It is gratifying to see that in the manufacturing districts the trades into which copper enters as a raw material have improved since the reduction to 126^l. per ton, especially the brass foundry trade. Should then, that rate, and the present standard for copper ores, be maintained, it is evident that 1857 will be a more prosperous and remunerative year for copper mining than was 1856. Whether it will be a more active year in the way of share dealing is another question, the event of which will in a considerable degree depend upon the money market; but already there are circumstances inducing the opinion that a favourable change in our monetary relations is at hand, and whenever that change is realised mining, as well as other branches of industry, will receive a beneficial impulse.

The drop last week in the price of tin has reduced black tin to 139^l. per ton, which is still 6^l. above last year's quotations, black tin in May, 1856, having been 133^l. per ton; so that, notwithstanding two reductions since the commencement of the present year, tin mining is yet more remunerative than it was in 1856. There are apprehensions with some parties that there will be a further decline about Midsummer, and it is said that the very large production of Great Wheal Vor must have a permanent effect upon prices. Great Wheal Vor sold last quarter 205 tons for 17,022^l, and the produce of Dolcoath has greatly increased, it being expected that with the aid of the new machinery 50 tons a month will be returned. But notwithstanding this, and the increasing produce of some of the mines in the St. Ives district, there is fair reason to believe, looking at the augmentation of the exports of our tin manufactures, that a sufficient demand will be maintained for all we can produce, and that the price of tin, though it may fluctuate somewhat, will not, on the whole, drop below the rates of last year; and if last year's prices are maintained, the tin mines of Cornwall will do well.

Pig-lead sells from 24^l. 5s. to 24^l. 15s. per ton. In May, last year, English pig-lead was from 26^l. 10s. to 27^l. per ton. The price is below that of this time twelve months, but sellers are firm, and probably there will be an advance.

Alfred Consols shares have dropped to 20^l, for which there does not appear to be any particular reason in the decension of the mine. At Wheal Buller meeting, on Tuesday, the dividend was 7^l. 10s. per share, the previous dividend having been 5^l. whilst the balance was increased from 14^l. to 15^l. although 200^l. income-tax was charged. The mine is not looking quite so well in the eastern part, but the 60 may be fairly expected to improve on being driven further east, and the next dividend will, no doubt, be a large one. At Great South Tolgus, the lode is reported to be worth from 250^l. to 300^l. per fm., having improved since last week, when the produce was 12 tons per fm. This appears to be at present the richest copper lode in the county; its continuance remains to be proved; but the mine appears to have the elements of a great and productive one, and the shareholders may esteem themselves fortunate. The shares have advanced to 19^l. and upwards. There have also been enquiries in South Tolgus shares at 14^l. to 14^l. 10s. At North Frances, there is a capital lode in Eales's shaft, and the quality of the ore was shown by last week's ticketing, when 24 tons sold at 10^l. 10s. 6d. per ton, and 6 tons at 44^l. 16s. per ton. At Mackean's shaft also an improvement is expected. At Penstruthal meeting, on Friday last, there was a call of 6s. 3d. per share. This mine is worthy of a vigorous prosecution; it is thought by some that a mass of ore will be met with at greater depth. At St. Ives' Consols meeting, the dividend was 7^l. per share. South Frances' shares continue flat at from 29^l. to 30^l.; West Seton, 31^l. to 32^l. West Basset looks well in the bottom of the mine, and there are strong indica-

tions of improvement. At Great Wheal Busy, the surface presents the appearances of an extensive mine; and it is said that some fine courses of tin and copper ores will soon be available, from which the returns will be increased. The engine is working at considerable speed. The Chacewater district is likely to become a very active mining district again; and the Tywarnhaile Mine, whenever it resumes working, will draw renewed attention to the St. Agnes district. At Boiling Well there are good indications, and it is thought by many that there will yet be a profitable mine there. East Basset shares have slightly improved. West Stray Park, 6s. Cargoll, 15s. and 16s. South Garris, 24s. West Rosewarne deserves a vigorous trial, and it is likely to be judiciously worked under the present management.

The Mining School at Truro does not appear to be making much progress in the way of attracting pupils. The master of the mining department has lately accompanied the students to West Seton, the United, and other mines; and there seems to be some advantage in this, as compared with mining schools in other parts of the kingdom. But the feeling amongst mine agents is, as heretofore, that the school ought to have been established in the midst of a mining locality, within a few minutes' walk of mines, where enquiring students would have the practical operations constantly before their eyes, and might frequently go underground to observe for themselves, and learn from experienced miners and agents. It was said there was not money enough subscribed to meet the expenses of the institution, and to provide a laboratory away from Truro (where there was one before existing); and thus, in fixing the school at Truro, the convenience and efficiency of the mining department were surrendered to the necessities of the chemical department. From what I hear, there does not seem much probability that the school will be supported at Truro beyond the three years for which subscriptions have been made. But could not an effort be put forward for establishing a school at Redruth or Camborne, in the midst of the mines, and there furnishing it with a laboratory? As long as the school is carried on at Truro I do not believe it will succeed. Will not the Members for West Cornwall (Mr. Michael Williams and Mr. Richard Davey) turn their attention to this subject, and take upon themselves the initiative for the establishment of a really useful mining institution for the county?

In connection with such an institution there might be formed a museum, containing models of improved machinery, and specimens of improved materials for mining purposes. For example, a model of Zennor's rotating baffle is now placed in the Museum of the Royal Institution, at Truro, and its action is explained to the students of the Mining School. This is said to be a really useful machine, and mine agents would do well to turn their attention to it.

It was noticed in the Journal that at the last meeting of South Frances adventurers, objection was made to the chief agent occupying so much of his time in inspecting various mines in different parts of the county, for adventurers or intending purchasers in those mines. It is well known that the practice of mine inspection is increasing, and it is a very good sign of the times, as showing that persons are more cautious than they were formerly, and consequently are not so likely to be deceived by fallacious reports. But no managing agent can reasonably expect that the adventurers who employ him will allow him to be very frequently absent from his duties in the superintendence of their own mine. This absenteeism, however, has been an increasing evil for some time past, on the part of chief agents of some of the best mines in the county; and South Frances shareholders are not the only ones who have felt that they had reason to complain of the usage. But to South Frances adventurers belongs the merit of first speaking out on the subject, and their doing so will perhaps operate as a check on their own and other agents. And there is another evil adventurers complain of, which is, that agents undertake the superintendence of too many mines. This is a matter which should be looked into, and if it is thought that the direction of the workings of several smaller mines call an agent away too often from the affairs of the mine which principally employs him, such a course must be checked and stopped. It is a healthy symptom that adventurers in the present day are beginning to look more and more particularly into their own affairs, and are disposed to see that agents and purasers properly attend to the duties of their respective offices.

But although it is a great evil when agents are very much absent from the mine which mainly employs them, it can scarcely be expected, and should not be enacted, that they should altogether cease from inspecting other mines. By so doing, they realise an important addition to their incomes, and not only so, but confer, in many instances, a benefit upon those who are seeking to invest in mines, and who want information and advice. Until a class of mine inspectors shall arise, experienced, honest, and reliable men, who will make it their business and profession to inspect mines, without being connected with any particular one, the present system would seem to be a necessity, and is only open to reprehension in its abuse, which is, when the chief agents of our large mines give too much time to the inspection of other mines, and are thus prevented from giving that close and unremitting attention which they ought to give to the affairs and working of their own mine.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

MAY 21.—We have nothing new to notice this week with regard to the iron trade, which continues to maintain a degree of firmness and activity that is likely to extend throughout the present year. The demand for home consumption is steady, but the orders for export are large and increasing, a fact fully borne out by the rapid increase in our shipments.

The coal trade maintains an average steadiness considering the season, and were the export trade better cultivated, we should have a less accumulation of stock and better prices would be realised.

The success of lead mining in Derbyshire is becoming daily more apparent. The Eymore mine is looking well, and this week the shares have been sold at 57s. 5s. 2s. 6d. paid. Chapel Dale shares remain stationary as regards price, and they have been dealt in at $\frac{1}{2}$ premium.

We have endeavoured at some trouble to present weekly a report of the operations of the North Derbyshire Company, which has been established under the most favourable circumstances, and whose chances of success are regarded with a degree of certainty, greater than is usually done in mining affairs. We ascertained that a large speculator who held upwards of 500 shares, had suddenly thrown the whole of them upon the market, and having disposed of them he left the country regretted by none, except those whose claims he had forgotten to liquidate. This had the effect of glutting the market and depreciated for a time the value of the shares, but we advised the shareholders not to be alarmed at what was taking place in the market but to hold their interest until the works at the mine had been put in order. The shares are now eagerly enquired after, but there are no sellers, except at a premium; indeed, we should not be surprised if the stock of this company is not quoted at double its present price in a very short time. The mine has now been completely unwatered by one set of pumps, and the two other lifts have been put in order, so that if the company should be visited with a perfect flood the three lifts of pumps would be amply sufficient to raise it. The miners will soon commence mining operations for the first time since the formation of the company, and from what we can learn there is not the shadow of a doubt but that great results will be realised, the company's seat being in a rich mineral field, and the great Eymore vein running in a direct line with the company's mine. A concern which had been left unworked by the ancient miner is believed to contain a vast quantity of lead.

The Red Rake and Sallad Holes Mines had each a sale of ore on Thursday. There never was a period in the previous history of lead mining in Derbyshire when the same spirit and enterprise was manifested for the development of its mineral riches.

THE IRON AND COAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN WOLVERHAMPTON.]

MAY 22.—The accounts given of the state of the Iron trade concur in representing it as remarkably firm and healthy, and affording good prospects of a continuance and increase of the activity which at present prevails. The make of pig iron is very large. Parties who had furnaces blown out some time ago keep them now in full blast, and people are inclined to extend the means of production, but the state of the money market necessarily puts a check upon new enterprises. The stock of pig iron in the district is greatly reduced and prices are very firm. The reports from North Staffordshire are equally satisfactory respecting the state of the iron trade there.

Coal, at present, maintains its price, but a fall in domestic kinds appears likely, as a result of the present warm weather. Some time ago a so-

society was formed in Birmingham for the purpose of the members supplying themselves with coal and coke for their own use direct from the mines at lower rates than they could obtain them from dealers. The society has progressed greatly, the sales of coal to members, for 1856, amounting to 61117. A similar society has been formed in this town, and, so far, promises well. One great difficulty in connection with the coal trade is the practice of giving large weight at the pits, which introduces a great degree of uncertainty and opens the door for much mystification and fraud. The plan of selling 26 or 28 cwt. for a ton is absurd. It would in this, as well as in all trades, be far better for words to have a specific, constant, and generally understood signification. The same remark applies to the sale of corn, in which all kinds of measures prevail, and to many other articles of ordinary use.

An effort was made here some time ago by the farmers to adopt measures and weights for the sale of corn corresponding to the imperial measure, but it proved a failure, the millers being disinclined to any alteration. The subject will probably be brought before Parliament.

The general trades of the district are steady, perhaps some greater degree of activity may prevail, but there is nothing like a flush of orders. Makers are fairly employed, but a much larger business could be done if the demand for goods was more extensive. Still a steady current of trade prevails, and very few workmen are unemployed. There are many reasons for anticipating a good autumn trade.

On Tuesday, another man died at the hospital from injuries received from the explosion of the blast furnace at Messrs. Riley's, near Bilton. This is the sixth death from this sad occurrence. A subscription is being entered into for the families of the sufferers.

A pamphlet has recently been published, entitled *The Iron Question Vindicated*, which is a defence of the work of Mr. Joseph Hall, of Tipton—noticed some time ago in this letter—from the hostile criticisms of supposed interested parties. It is written with considerable ability, and the author trips up his opponents in a very clever manner. As the writer of this part of your Journal was led to form a very favourable estimate of Mr. Hall's claims, from careful enquiry on the subject, it is needless to say more than that the author of the pamphlet fully disposes of the objections made to the claims of that gentleman as an inventor. It may be doubted whether after Mr. Richard Cort's abandonment of the position he had taken up such a vindication were needed. The pamphlet only makes more palpable the want of a masterly and comprehensive history of the improvements in the manufacture of iron.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

MAY 21.—There has been a reaction this week on the late advance in the stock market, and prices have fallen about 10s. per cent.; prices of shares, however, were well maintained, and the ease which seemed likely to take place in the money market gave a stimulus to business, which was more active, both in the stock and railway share markets, while mining shares were dull. The following are the latest quotations:—Consols, 92s.; New 3 per Cent., 92s.; National Bank, 34s.; Royal Bank, 23s.; National Insurance, 27s.; Patriotic Insurance, 7s.; Consumers' Gas, 7s.; Mining Company of Ireland, 15s.; Cork and Passage Railways, 12s.; Belfast Junction, 41s.; Dundalk and Enniskillen, 18s.; Great Southern and Western, 10s.; Irish South-Eastern, 7s.; Midland Great Western, 3s.; Waterford and Limerick, 3s.

The Great Southern and Western Railway Company are now about issuing to the proprietary, *pro rata*, at par, 100,000 new stock, which they find it necessary to create to pay for some extensions. Notwithstanding this, the marketable stock has been gradually rising, while at the same time the last week's traffic shows a decline of about 7000, and on the 20 weeks of this half-year a total decline of 7476.

The illuminating gas from peat is now going ahead, several new orders having been received by the inventor, Mr. Johnson, at the Monksievian Distillery, where it has now been at work for some months. The invention is becoming daily more appreciated, and the saving has been found to be very considerable, the cost of lighting the establishment now being only about one-fourth what it was before.

Some time since, I drew your attention to slate quarries in the south-west of Ireland, from which specimens and flags were forwarded to Mr. G. E. Magnus, of the celebrated Pimlico Slate-works, and who reported very favourably upon their character, and who considered those forwarded him, though only taken from the top of the quarry, to be almost equal as roofing slates to the Bangor slates. It will be satisfactory to know that the quarries to which I allude are progressing most favourably, there being at present a large amount of excellent quality ready for shipment. There is no reason why Ireland should be dependent for her supply of slates upon Welsh quarries, while she abundantly possesses within the limits of her own shores slates which are equal to any that can be produced elsewhere; but enterprise, skill in working, &c., which I trust will no longer be found wanting, have hitherto been deficient, and the consequence has been that we must import from other countries what we could produce profitably at home.

There being large holders in South Devon Consols Mine shares here, several enquiries are made to know when the annual meeting will be held.

MEMS. OF MINES AND MINERS—No. IV.

Although the name of Sir CHARLES LEMON can hardly be added to the list of miners, literally speaking, yet his scientific contributions on geology, and other kindred subjects, but, above all, his liberality towards every thing tending to further these interests, fully entitle him to take a proud position in such associations. The princely revenue enjoyed by the hon. Baronet was originally derived from mining, his ancestors having been extensively engaged in that profession, it is said, as working miners at the Old Great Wheal Fortune. Sir Charles, it will be remembered, some few years since, munificently offered to endow a mining school on such a scale as to be effective, the magnificent sum being sufficient to place it in a first-rate position. His urbanity, his kindness in patronising all public meetings for forwarding mining, or anything relating to it, and, above all, his literary and mechanical talents, no less than his well-known good taste in the fine arts, fully entitle him to the appellation by which he is known in the county he so worthily represented in Parliament—viz., the Miner's Friend. Long may he live to enjoy the title!

Mr. JOSEPH CARNE (Penzance) is one of the geniuses who, by strict study, perseverance, and extensive enquiry, acquire a knowledge of the subject of mining and mineralogy, unattainable by an uneducated person, his practice ever so extensive. Some of the ablest papers ever produced in the *Transactions of the Royal Geological Society* are from his pen, and evince an amount of knowledge truly wonderful for one who, though never six feet underground, was as practical a miner as could be found anywhere. He may justly be said to be the Macbeth of these men, for he certainly not only patronised them by his purse, but by his countenance also. His cabinet of specimens is almost without rival. In the western part of Cornwall, if any rare mineral were discovered, it was sure to be preserved for Mr. "Joe" Carne, whose enquiries were sure to elucidate every particular connected with them, much to the delight of the men. His liberality has furnished many most valuable specimens of rocks, minerals, and veins to our public museums, whilst his works have rendered his name immortal as a scientific miner.

WM. JORRY HENWOOD stands at the very head of his profession as a practical and scientific miner, having had experience in nearly all parts of the world where minerals are to be found. From his earliest years, even at school, he gave abundant and striking proof of great ability. His education was of a liberal description, including the classics. His first striking experiment was on a gas discovered to be exuding in a Cornish mine, which he at once named as being azote. Having been engaged at the works of the Cornish Colour Company, at that time working near Penryn, he laid the foundation of chemical affinities, so useful to him in future life. He early commenced a series of communications to the Royal Cornwall Geological Society, remarkable for their lucidity and plain statement of facts. His efforts were untiring, his good education gave him facilities for figures and expression of language at once instructive and interesting. No labour did he deem too great to undergo in pursuit of his favourite science. When Mr. Fox, and other Cornish savants, were desirous of ascertaining certain phenomena connected with mineral veins, Mr. W. J. Henwood was the individual selected to conduct the experiments; under which circumstances he naturally gained an experience and practical knowledge unknown to the greatest professors, as far as the Cornish mines are concerned, of which his numerous contributions to the pages of the *Transactions of the Royal Society*, and other scientific works, are abundant proofs. After completing these investigations he accepted the office of secretary and curator of the Royal Geological Society of Cornwall, in which capacity he extended and classified the wonderful collection of rocks to be found there in a manner that was, with his other accomplishments, appreciated. He obtained the friendship of the leading savants of the day, particularly of Sedgwick, Fox, Lemon, Carne, Gilbert, and a host of other worthies. His works were held up as text-books and authorities beyond dispute.

His industry and perseverance at last were, as a natural consequence, duly rewarded. A vacancy occurring in the office of the Duchy of Cornwall, this gentleman, as a just tribute to his endeavours, was offered the situation of deputy assay master. This had always been deemed a mere sinecure, but not so to him. In conjunction with the late Mr. James Beckerleg, of Penzance, he set about clearing the Augean stable of this then sealed book. This was accomplished in the most satisfactory manner; and when the office was abolished at the alteration in the Stannary, he received a pension, which we believe he still enjoys. As soon as his services were at liberty, we find him sent to Brazil, to examine that country for the Government; then one of the American States availed themselves of his experience, and some important facts were elucidated. Jamaica, the East Indies, and other countries, have witnessed his explorations. After what we have detailed, it may be safely said he stands at the head of the profession as a learned and experienced miner, of most profound acquaintance with every subject connected therewith; and in the decline of life he lives in the heart of the district, honoured by the society and friendship of the great and the good men of his youth, and with a competency as ample as it is deserved.

GEO. HENWOOD.

P.S.—It must be understood the writer of these brief memos does not belong to the family of W. J. H., except in a very remote degree, but he sketches such as deserve to be known for their industry and ability.

BRISTOL MINING SCHOOL.

The lecture on Monday was given by Mr. G. C. Greenwell, it being his second lecture on "Ventilation." In commencing, Mr. Greenwell referred to his description of the principal gases met with in mining, as given in his former lecture.

Hydrogen, in combination with carbon and atmospheric air, formed the most explosive compound, and carbonic acid acted as a mineral poison. On this occasion he would direct attention to some important particulars respecting the air-ways and the properties of air, as practically exhibited and utilised in the ventilation of mines. He had before shown, by a model, the efficiency of furnace ventilation, and that the effect of opening a door in a way communicating directly with the downcast and upcast shafts was not so considerable in injuring the ventilation, where the air-ways and upcast were spacious, as was generally supposed. The friction of the current of air in mines was inversely as the square of the area of the air-way, and directly as the length of the air-way, so that if the area were increased from 10 to 23, the friction would be reduced by three-fourths; and by reducing the length one-half, the friction would be lessened by one-half. This was of great value in practice, as it showed the advantages to be derived from judiciously splitting the air; in doing which it was often necessary to carry currents of air across each other, by means of arches, and to regulate the supply of air to the respective districts, by contracting the area of the shortest air-way.

This contraction might be effected by sliding doors, which were to be constructed so as to lock for different spaces of contraction, to prevent anyone tampering with the supply of air. When the aperture of the regulator was filled with air, in effect it became a stopping. By splitting the air current, you at once increase the area of the air-way, and diminished its length, removing in part the two principal causes of friction, and producing a corresponding increase in the general ventilation. The furnace was, perhaps, the best and most practicable means made use of to assist ventilation. Any contraction of the furnace arch, caused by the fire-wall at the inner end of the burs, might be obviated by giving a little rise in elevation to the arch, and the danger of explosion at the furnace removed by the use of a dumb drift.

Air was made to expand 1-480th part of its volume at a temperature of 32°, for every additional degree of heat, Fahrenheit; so that the difference in the length of the downcast and upcast columns of air of equal weight would be the distance through which the downcast column of air had to fall in *vacuo*. Supposing the distance to be 16 ft., then by the law respecting falling bodies, the rate of air per second might be easily calculated, making the necessary allowance for the resistance due to friction. Various mechanical contrivances had been applied to assist ventilation, but it was questionable whether any of them had in any degree superseded the furnace. The mode of high-pressure steam, as suggested by Mr. Gurney, had been thoroughly tested at the Seaton Delaval Colliery, where it was proved that the increase of air-way was due not so much to the jets of steam as to the heat of the boilers. The inventor had lost sight of the disparity between the length of tube in a locomotive and the length of an upcast shaft.

Mr. Buddle's machine was next noticed, the defect in which was in the leakage of the piston. An improvement in this respect was effected by a Cornishman, who constructed a piston to work in water, but was defective in exhausting the air by only one stroke of the piston. By a combination of these two inventions Mr. Struve had obviated both defects, but an objection, common to all machines, was their liability to get out of order and to suspend the ventilation, and the cost of many of them both in the purchase and to keep them at work.

NEW LIMITED LIABILITY MINING COMPANIES.

NORTH STAFFORDSHIRE COAL AND IRON COMPANY—To purchase lands in Stafford or Chester, to obtain coal, ironstone, and other minerals, and for making railways for their conveyance, and to convey the same to the North Staffordshire Railway. Capital, 20,000*l.*, in 200 shares of 100*l.* each. Shares taken, 134. Mr. T. H. Birley, of Prestwich, took 10 shares; Mr. G. Bidwell, of Exeter, 1*l.*; Mr. G. C. Churchill, 5*l.*; Mr. Freeland, Manchester, 23*l.*; Mr. France, of Dock-street, Leeds, 22*l.*; Mr. Glover, Chancery-lane, Manchester, 25*l.*; Mr. Longdon, King-street, Manchester, 10*l.*; Mr. Smith, Baring-crescent, Exeter, 10*l.*; Mr. J. Taylor, of the Leeds Ironworks, Leeds, 10*l.*; Mr. Westcombe, accountant, Exeter, 10*l.*; Mr. G. Taylor, Parkhill-terrace, Hale, Leeds, 5*l.* Offices, 5*l.* Offices, Colliery Offices, Talk o' the Hill, Staffordshire.

WHARFEDALE MINING COMPANY—To open mines and mining operations in England. Capital, 40,000*l.*, in 8000 shares of 10*l.* each. Mr. J. N. Horne, of Leeds, merchant, takes 2850 shares; Mr. J. W. Reed, of Leeds, 1600*l.*; Mr. W. Craig, of Kettlewell, engineer, 1650*l.*; Mr. J. Holt, of Leeds, wool-merchant, 500*l.*; Mr. H. Carr, of Pudsey, manufacturer, 260*l.*; Mr. J. Mousier, of Leeds, engraver, 275*l.*; Mr. G. Craig, of Aysgarth, 100*l.* Total shares taken, 7175. Solicitor, Mr. T. Simpson, Leeds.

CORNWALL GREAT CONSOLIDATED LEAD AND COPPER MINING COMPANY—To purchase the rights of the leases in the South Maria, the Tamar, and the Sutleach Consols Mines, and other mines in Cornwall, and to smelt ores and minerals. Capital, 24,000*l.*, in 12,000 shares, of 2*l.* each. Mr. T. Bartlett, of Hothly Hill House, Kent, takes 7000 shares; Mr. Bathurst, of 10, Baker-street, Portman-square, 250*l.*; Mr. Bennett, of South Petherin, Cornwall, 50*l.* Shares taken, 7430. Mr. Burn, solicitor, 3*l.* Lombard-street.

FOREST OF DEAN AND SOUTH WALES IRON, COAL, AND COKE COMPANY—To lease or purchase mineral tracts in the Forest of Dean and South Wales, and to raise the mineral products. Capital, 250,000*l.*, in 25,000 shares of 10*l.* Mr. S. H. Blackwell, ironmaster, of Dudley, takes 500 shares; Mr. T. D. Clare, mineral merchant, of Birmingham, 500*l.*; Mr. H. Hart, of Newnham, Gloucestershire, 500*l.*; Mr. R. Page, Dover, 250*l.* Shares taken, 1770. Mr. Wilkinson, solicitor, 2*l.* Nicholas-lane, Lombard-street.

DUN MOUNTAIN COPPER MINING COMPANY—To work these mines in the province of Nelson, New Zealand. Capital, 75,000*l.*, in 75,000 shares of 1*l.*, with power by the authority of any general meeting to increase the capital. Twenty persons subscribe for 1000 shares each—Mr. Bateman, of 35, Sun-street, Bishopsgate; Mr. W. Brand, 109, Fenchurch-street; Mr. S. Curtis, 20, F

PREVENT SMOKE AND INCREASE STEAM.—PATENT REGULATING AIR-DOOR, for MARINE and STATIONARY STEAM-BOILERS, and for LOCOMOTIVE and OTHER FURNACES.

"Passengers left Victoria Docks with air apertures closed (i.e. action of invention suspended), steam fell in 20 minutes from 15 lbs. pressure to 13; smoke heavy for five minutes at each firing. Air apertures then opened; smoke suppressed in 30 seconds; and in ten minutes after adjustment of apertures steam blowing off at 15 lbs., and maintained when pilot left at sea."

For further particulars respecting the Patent Regulating Air-Door, and the Patent Safety Marine Boiler; and with reference, also, to his Patent Land Furnaces, Domestic Stoves, and other inventions comprised in his System of Smoke Prevention, apply to Mr. JOHN LEE STEVENS, 1, Fish-street-hill, City, London (E.C.), where a great variety of models and drawings may be seen, and reports and testimonials obtained.

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For further particulars, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

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TESTIMONIAL.
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EVERY DESCRIPTION of IRON ALWAYS ON SALE. Also, TIN-PLATES, WIRE, RAILWAY SPIKES, &c.

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Among other recent important inventions, the company beg to call particular attention to PRINCE'S PATENT for CASTING RAILWAY CHAIRS; POLE'S PATENT IMPROVED FISH JOINT; PATENT HOLLOW SPIKES; and Dr. BOUCHERIE'S IMPROVED PROCESS for PRESERVING SLEEPERS, FENCING, TELEGRAPH POSTS, &c. FROM DECAY, which may be seen in operation daily at the Polytechnic Institution, and on the company's premises.

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| Shares. | Paid. | Last Price. | Present. | Dividends per Share. | Last Paid. | Shares. | Paid. | Last Price. | Present. | Dividends per Share. | Last Paid. | Shares. | Paid. | Last Price. | Present. | Dividends per Share. | Last Paid. |
|--|-------------|-------------|-------------|----------------------|-----------------------|--|---------|-------------|----------|----------------------|------------|---------|---|-------------|----------|----------------------|------------|
| 5120 Alford Consols (cop.), Phillack [S.E.], 21. 11s. 10d. | £20 10s. | 18 10s. | £10 13 0 | £20 12 0 | — April 6, 1857. | 4900 Daren (all-lead), Cardiganshire | 5 | 5 | 5 | 5 | 5 | 12 10s. | 4900 Penstruthal (copper) | 5 | 5 | 5 | 5 |
| 1634 Balleswidden (tin), St. Just | 11 1s. | 4 | — | 12 5 0 | 0 3 0—Jan. 1, 1854. | 4900 Devon & Cornwall United (cop.) | 21 7 8 | 7 12 | 7 12 | 7 12 | 7 12 | 11 10s. | 5485 Perran Consols, Perranporth | 5 | 5 | 5 | 5 |
| 4000 Bedford United (copper), Tavistock | 21. 6s. 8d. | 7 | — | 8 5 0 | 0 7 0—May 20, 1857. | 4900 Devon and Courtney (copper) | 5 | 5 | 5 | 5 | 5 | 10 10s. | 1166 Perran St. George (copper, tin) | 5 1/2 | 5 | 5 | 5 |
| 240 Boscan (tin), St. Just | 20 4s. | 105 | 100 105 | 15 0 0 | 0 3 0—Mar. 4, 1857. | 4900 Devon Burr Burr (copper) | 5 | 5 | 5 | 5 | 5 | 10 10s. | 2000 Plympton Consols | 5 | 5 | 5 | 5 |
| 200 Botallack (tin, copper), St. Just* | 91 1s. | 270 | 270 280 | 30 5 0 | 0 7 0—Apr. 21, 1857. | 4900 Devon Wheel Bearer | 5 | 5 | 5 | 5 | 5 | 10 10s. | 2048 Posteryd (lead), Cardigan | 5 | 5 | 5 | 5 |
| 100 Brightside and Froggatt Grove, Derbyshire | 50 | 66 | — | 3 0 0 | 0 3 0—Apr. 20, 1856. | 4915 Duke of Cornwall, Lostwithiel | 21 16 | 1 | 1 | 1 | 1 | 10 10s. | 2400 Pucklehill United (tin) [S.E.] | 5 | 5 | 5 | 5 |
| 100 Brynford Hall (lead), Flint | 20 | 80 | 80 80 | 13 0 0 | 0 5 0—July 31, 1856. | 3000 Dyngwyl (lead), Wales | 21 11 6 | 18 1/2 | 18 1/2 | 18 1/2 | 18 1/2 | 10 10s. | 4906 Queen of Dart, Ashburton | 5 | 5 | 5 | 5 |
| 1000 Bryntyll, Llanidloes, Montgomeryshire | 7 | 3 | 2 1/2 3 | 0 5 0 | 0 5 0—July 1, 1856. | 255 Eaglebrook, Llanbangel, Card. | 40 | 20 | 19 20 | 19 20 | 19 20 | 10 10s. | 10000 Rhelidol United Mine | 5 | 5 | 5 | 5 |
| 1000 Bwlch (silver-lead), Cardiganshire | 3 | 1 | — | 0 2 0 | 2 6—July 30, 1856. | 4900 East Alfred Consols | 21 15 | 24 | 24 | 24 | 24 | 10 10s. | 2000 Rosewell Hill & Rameon United | 5 | 5 | 5 | 5 |
| 1000 Carn Brea (copper, tin), Illogan | 15 | 50 | 45 50 | 22 10 0 | 2 0 0—May 22, 1857. | 256 East Basset (copper), Redruth | 50 | 60 | 60 65 | 60 65 | 60 65 | 10 10s. | 1014 Rosewarne and Herland United | 5 | 5 | 5 | 5 |
| 2048 Carnydrth (tin), St. Just | 4 1/2 | 8 1/2 | 7 1/2 8 1/2 | 0 15 0 | 0 3 0—June 16, 1856. | 1024 East Buller (copper), Redruth | 12 | 15 | 15 | 15 | 15 | 10 10s. | 4996 Rosewarne Consols | 5 | 5 | 5 | 5 |
| 200 Cefn Cwm Brynwy (lead), Cardiganshire | 33 | 55 | — | 3 0 0 | 0 3 0—Sept. 4, 1855. | 2048 East Falmouth (lead) | 3 | 3 | 3 | 3 | 3 | 10 10s. | 5000 Roan Hill (silver-lead), Selop | 5 | 5 | 5 | 5 |
| 1000 Collacome (copper) | 10 | 50 | 50 52 1/2 | 1 0 0 | 1 0—Mar. 26, 1857. | 3200 East Powey Consols | 3 | 3 | 3 | 3 | 3 | 10 10s. | 5230 Silver Brook, Ashburton | 5 | 5 | 5 | 5 |
| 256 Condurrow (copper, tin), Calstock | 20 | 160 | 150 160 | 83 0 0 | 4 0—April 5, 1857. | 4098 East Gonwenna (copper) | 15 | 20 | 20 | 20 | 20 | 10 10s. | 1024 Silver Valley, Truro | 21 10 10s. | 24 | 24 | 24 |
| 3000 Craven Moor, Limited (lead), Yorkshire | 40 | 140 | — | 75 0 0 | 5 0—April 16, 1857. | 4000 Sithney Wheel Bearer (tin) | 4 | 4 | 4 | 4 | 4 | 10 10s. | 4000 Sithney Wheel Bearer (tin) | 4 | 4 | 4 | 4 |
| 125 Cwmystwith (lead), Cardiganshire | 60 | 140 | — | 104 5 0 | 10 0—Sept. 29, 1856. | 2000 South Basset (copper, tin) | 15 | 15 | 15 | 15 | 15 | 10 10s. | 12000 Sortridge & Bedford, Tavistock | 12 10 10s. | 44 | 44 | 44 |
| 240 Derwent Mines (silver-lead), Durham | 304 1/2 | 150 | — | 568 0 0 | 12 0—May 22, 1857. | 256 East Basset (copper), Redruth | 50 | 60 | 60 65 | 60 65 | 60 65 | 10 10s. | 6000 South Bog (lead), Selop | 10 | 10 | 10 | 10 |
| 1024 Devon Great Consols (cop.), Tavistock [S.E.] | 45 | 45 | 470 480 | 17 0 0 | 12 0—Mar. 2, 1857. | 1024 East Buller (copper), Redruth | 12 | 15 | 15 | 15 | 15 | 10 10s. | 6100 South Buller and W. Penstruthal | 5 | 5 | 5 | 5 |
| 672 Ding Dong (tin), Guisborough | 32 | 17 | 17 | 16 7 6 | 1 0—Mar. 2, 1857. | 2048 East Providence (tin), Uly Le. | 15 | 20 | 20 | 20 | 20 | 10 10s. | 5000 South Care (cop., tin) | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 |
| 175 Dolcoath (copper, tin), Camborne* | 257 1/2 | 310 | — | 920 0 0 | 7 0—April 12, 1857. | 1000 East Rosewarne (cop., tin), Gwiness | 15 | 15 | 15 | 15 | 15 | 10 10s. | 5144 S. Condurrow (tin, cop.), Camb. 11s. 6d. | 6 | 6 | 6 | 6 |
| 12800 Drake Walls (tin, copper), Calstock | 11 1/2 | 25 | 25 25 | 0 11 6 | 0 3 0—May 5, 1857. | 12000 East Rosewarne (tin), Crown | 1 | 1 | 1 | 1 | 1 | 10 10s. | 3911 South Cremer (copper) | — | — | — | — |
| 300 East Daren (lead), Cardiganshire | 32 | 85 | — | 24 0 0 | 3 0—May 1, 1857. | 12000 East Suddrige | 15 | 15 | 15 | 15 | 15 | 10 10s. | 21000 South Devon Consols | 1 | 1 | 1 | 1 |
| 124 East Pool (tin, copper), Pool, Illogan* | 21 1/2 | 340 | — | 280 0 0 | 7 0—Feb. 23, 1857. | 2000 South Fox (cop., tin) | 15 | 15 | 15 | 15 | 15 | 10 10s. | 5208 South Astell Consols | 3 | 3 | 3 | 3 |
| 1024 East Wheal Margaret (tin, copper) | 6 1/2 | 9 | 9 | 0 5 0 | 0 5—Jan. 11, 1854. | 2000 South Trefusis (copper) | 15 | 15 | 15 | 15 | 15 | 10 10s. | 2000 South Gorland | 5 | 5 | 5 | 5 |
| 5703 Exmouth (silver-lead) | 41 1/2 | 144 | — | 210 0 0 | 0 2 0—April 22, 1857. | 10000 South Providence (tin), Slinney | 23 7 | 7 | 7 | 7 | 7 | 10 10s. | 1014 South Wheal Robert (copper) | — | — | — | — |
| 1400 Eynam Mining Company (lead), Derbyshire | 5 | 45 | 45 | 11 13 4 | 1 0—April 23, 1857. | 1033 East Wheal Rose (silver-lead) | 34 9 | 9 | 8 9 | 8 9 | 8 9 | 10 10s. | 1024 So. Wh. Croft (cop.), Illogan 21 10 10s. | 5 | 5 | 5 | 5 |
| 4040 Fowey Consols (copper), Twardreath | 4 | 7 | 7 | 41 4 3 | 0 6—Feb. 17, 1857. | 4098 East Wheal Wrey | 80 6d. | — | — | — | — | 10 10s. | 1024 So. Wh. Seton (cop.), Camborne 4 1/2 10 10s. | 10 | 10 | 10 | 10 |
| 4448 General Mining Co. for Ireland (cop., lead) | 3 1/2 | 25 | 25 25 | 1 0 8 8 | 0 3—June 5, 1855. | 5000 Fowey Consols (copper) | 15 | 15 | 15 | 15 | 15 | 10 10s. | 6000 South Wheal Wrey | 18 6d. | — | — | — |
| 1024 Gornanys (copper), St. Cleer | 13 1/2 | 17 1/2 | 17 1/2 | 0 7 6 | 0 7—Dec. 21, 1852. | 512 Forest (copper), Illogan | 5 | 4 | 4 | 4 | 4 | 10 10s. | 924 Strat Park | 23 9 | 4 | 4 | 4 |
| 243 Grambler and St. Aubyn (copper) | 109 1/2 | 105 | 100 | 2 0 0 | 2 0—May 5, 1857. | 3000 Fox Fox Alverny (t.c.e.), Limit | 5 | 3 | 3 | 3 | 3 | 10 10s. | 1447 Swanpool, Budock | 21 11 1/2 | — | — | — |
| 8000 Great South Tolynt [S.E.] | 3 1/2 | 18 1/2 | 19 20 | 0 6 6 | 0 4—April 21, 1857. | 5000 Frank Mills, Devon | 21 1 6 | 4 | 4 | 4 | 4 | 10 10s. | 2900 Tavy Con. (cop.), near Tavistock | 25 4 6 | 1 | 1 | 1 |
| 2668 Great Wheal Vor (tin, cop.), Helston [S.E.] | 7 | 5 | 4 1/2 5 1/2 | 0 5 0 | 0 5—June 20, 1855. | 5000 Galley-y-Ffrith-Rhodyn (Limited) | 3 | 3 | 3 | 3 | 3 | 10 10s. | 6400 Tees Side (lead), Cumberland | 21 1 | 1 | 1 | 1 |
| 119 Great Work (tin), Germoe | 100 | 140 | — | 231 10 0 | 7 10—Feb. 27, 1857. | 3000 Garreg (lead), Flint | 21 11 | — | — | — | — | 10 10s. | 1000 Tokenhull Consols, Liskeard | 10 | 10 | 10 | 10 |
| 1024 Herdshot (lead), near Liskeard | 8 1/2 | 7 | 6 1/2 7 1/2 | 2 12 6 | 0 7 6—Apr. 18, 1854. | 1000 Great Sorbridge, Whitechurch | 68 6d. | — | — | — | — | 10 10s. | 1024 Trebarvah, Perranporth | 27 13 | 3 | 3 | 3 |
| 8000 Hindon Down Consols (cop.), Calstock | 3 1/2 | 4 | 4 | 0 2 0 | 0 5—Jan. 28, 1857. | 1000 Great Tregiradoon (lead), St. Teath | 24 4 | 6 | 6 | 6 | 6 | 10 10s. | 5000 Treburcher Crown (Limited) | 5 | 5 | 5 | 5 |
| 2000 Holyford (cop.), near Tipperary | 11 | 8 1/2 | 8 1/2 | 4 2 6 | 0 5—Jan. 28, 1857. | 1000 Great Wheal United (tin) | 21 17 | 13 | 13 | 13 | 13 | 10 10s. | 5000 Trebetherick (cop.), St. Austell | 1 | 1 | 1 | 1 |
| 2360 Isle of Man (Limited) | 25 | 42 | — | 52 17 3 | 1 10—Mar. 5, 1857. | 1000 Great Howes United (tin) | 21 17 | 13 | 13 | 13 | 13 | 10 10s. | 5000 Trebetherick (cop.), St. Austell | 1 | 1 | 1 | 1 |
| 75 Jamaica (lead), Mold, Flintshire | 34 1/2 6d. | — | — | 380 0 0 | 5 0—Mar. 10, 1851. | 1000 Great Hewas United (tin) | 21 17 | 13 | 13 | 13 | 13 | 10 10s. | 5000 Trebetherick (cop.), St. Austell | 1 | 1 | 1 | 1 |
| 20 Laxey Mining Company, Isle of Man | 100 | — | — | 1370 0 0 | 50 0—Jan. 17, 1857. | 1000 Great Howes United (tin) | 21 17 | 13 | 13 | 13 | 13 | 10 10s. | 5000 Trebetherick (cop.), St. Austell | 1 | 1 | 1 | 1 |
| 160 Levant (copper, tin), St. Just | | | | | | | | | | | | | | | | | |